STIC Search Report
EIC 3700

STIC Database Tracking Number: 93367

TO:	From:
Jonathan M Foreman **Location: CP2-4B24** **Wednesday, May 07, 2003** **Case Serial Number: 09/973,568**	**Julie Walko** **Location: EIC 3700** **CP2-2C08** **Phone: 305-8587** **Julie.walko@uspto.gov**

Search Notes

Johnny:

Attached are the results of your request regarding an anaesthesia control system.

You'll find two sets of each prior art search (e.g., 2 full-text patent searches) – one for "coarseness", the other for "frequency & amplitude". I believe the only relevant citations that appear before your priority date are in the biblio NPL related to frequency & amplitude. I marked that packet with a yellow stickie and marked some of those with blue stickies. Although I marked some, I recommend you review the entire packet.

I also found a set of references on the Internet that may or may not be worth anything. I highlighted those that deal with AEP and were published before your priority date.

If you have any questions or would like this search reworked in any way, please do not hesitate to contact me at the number or address listed above.

Best Available Copy

Access DB# 93367

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name: Jonnni Foreman Examiner #: 79525 Date: 5/6/03
Art Unit: 3736 Phone Number 30 5-5390 Serial Number: 09/973668
Mail Box and Bldg/Room Location: CP2-4B24 Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

****

Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of Invention: Anaesthesia Control System

Inventors (please provide full names): Haralambos Mantzaris
Gavin N.C ~~Glasgow~~ Kenny

Earliest Priority Filing Date: 09/11/1996

**For Sequence Searches Only* Please include all pertinent information (parent, child, divisional, or issued patent numbers) along with the appropriate serial number.*

- Send sounds (clicks) to ears
- measure auditory evoked potentials (AEPs)
- w/ EEG (EEG not necessary)

* - Coarseness = amplitude + frequency of AEP

****

STAFF USE ONLY

Searcher: Julie Walker
Searcher Phone #: 305-8587
Searcher Location: CP2-2C08
Date Searcher Picked Up: 5/6/03
Date Completed: 5/7/03
Searcher Prep & Review Time: 95m
Clerical Prep Time:
Online Time: 50m

Type of Search

NA Sequence (#)
AA Sequence (#)
Structure (#)
Bibliographic ✓
Litigation
Fulltext ✓
Patent Family
Other

Vendors and cost where applicable

STN
Dialog ✓
Questel/Orbit
Dr.Link
Lexis/Nexis
Sequence Systems
WWW/Internet ✓
Other (specify)

PTO-1590 (8-01)

4pm

600/559

Inventor Search

7/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

011790194 **Image available**
WPI Acc No: 1998-207104/199818
XRPX Acc No: N98-164483

Anaesthesia **control system e.g. of closed loop type - calculates index representative of depth of** anaesthesia **from EEG amplifier signals derived from head mounted electrodes**

Patent Assignee: UNIV GLASGOW (UNIU); KENNY G N C (KENN-I); MANTZARIDIS H (MANT-I)
Inventor: **KENNY G N C ; MANTZARIDIS H ; KENNY G**
Number of Countries: 079 Number of Patents: 007
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 9810701	A1	19980319	WO 97GB2435	A	19970910	199818 B
AU 9742141	A	19980402	AU 9742141	A	19970910	199833
EP 926984	A1	19990707	EP 97940234	A	19970910	199931
			WO 97GB2435	A	19970910	
NZ 334586	A	20000929	NZ 334586	A	19970910	200060
			WO 97GB2435	A	19970910	
MX 9902403	A1	20000301	MX 992403	A	19990311	200123
AU 738350	B	20010913	AU 9742141	A	19970910	200164
US 20020117176	A1	20020829	WO 97GB2435	A	19970910	200259
			US 99267932	A	19990311	
			US 2001973568	A	20011009	

Priority Applications (No Type Date): GB 9618998 A 19960911
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9810701	A1	E	89	A61B-005/11	
Designated States (National): AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW					
Designated States (Regional): AT BE CH DE DK EA ES FI FR GB GH GR IE IT KE LS LU MC MW NL OA PT SD SE SZ UG ZW					
AU 9742141	A			A61B-005/11	Based on patent WO 9810701
EP 926984	A1	E		A61B-005/11	Based on patent WO 9810701
Designated States (Regional): AT CH DE DK ES FI GB LI PT SE					
NZ 334586	A			A61B-005/11	Based on patent WO 9810701
MX 9902403	A1			A61B-005/11	
AU 738350	B			A61B-005/11	Previous Publ. patent AU 9742141 Based on patent WO 9810701
US 20020117176	A1			A61M-016/00	Cont of application WO 97GB2435 Cont of application US 99267932

Abstract (Basic): WO 9810701 A

The **anaesthesia** control system maintains a patient (1) in an unconscious state whilst the patient undergoes surgery. The patient wears a pair of earphones (2) which are driven by a signal generator (3) to sound ''clicks'' of 1 ms duration at a frequency of 6.9 Hz to both ears. A liquid anaesthetic is supplied intravenously to the patient through a tube (4) from a pump (5).

A controller (7) receives an analog signal from an EEG amplifier (8) and generates an anaesthetic depth index for display (7a). The EEG amplifier comprises a medical grade preamplifier (9) the output of which is fed to a main amplifier (10) after filtering. The EEG amplifier is connected to three electrodes (20) which are attached to

the patient's head.

ADVANTAGE - Generates reliable quantitative measure of anaesthetic depth that safely maintains patient in unconscious state without requiring human intervention.

Dwg.1/8

Title Terms: ANAESTHETIC; CONTROL; SYSTEM; CLOSE; LOOP; TYPE; CALCULATE; INDEX; REPRESENT; DEPTH; ANAESTHETIC; EEG; AMPLIFY; SIGNAL; DERIVATIVE; HEAD; MOUNT; ELECTRODE

Derwent Class: P31; P34; P35; S05

International Patent Class (Main): A61B-005/11; A61M-016/00

International Patent Class (Additional): A62B-007/00

File Segment: EPI; EngPI

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Set     Items   Description
S1          3   AU='MANTZARIDIS H':AU='MANTZARIDIS HARALAMBOS'
S2         12   E3,E7
S3          2   AU='KENNY GAVIN NICHOLSON CLEGHORN'
S4         14   S1:S3
S5          3   S4 AND (ANAESTHESIA OR ANESTHESIA)
S6          3   IDPAT (sorted in duplicate/non-duplicate order)
S7          1   IDPAT (primary/non-duplicate records only)
? show files
File 347:JAPIO Oct 1976-2002/Dec(Updated 030402)
         (c) 2003 JPO & JAPIO
File 348:EUROPEAN PATENTS 1978-2003/Apr W04
         (c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20030501,UT=20030424
         (c) 2003 WIPO/Univentio
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200328
         (c) 2003  Thomson Derwent
File 371:French Patents 1961-2002/BOPI 200209
         (c) 2002 INPI.  All rts. reserv.
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Biblio Patents

Amp & Freq

12/5/1 (Item 1 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

010215912 **Image available**
WPI Acc No: 1995-117166/199516
XRPX Acc No: N95-092449

FM theta-inducing audible sound **in** brain waves - **using modulated wave with very low frequency wave of approx 20 Hertz or less superimposed on** audio **low-frequency wave**

Patent Assignee: HAYASHIBARA K (HAYA-I)
Inventor: MASAKI K; MATSUDA O
Number of Countries: 010 Number of Patents: 010
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 644525	A2	19950322	EP 94306755	A	19940915	199516	B
NO 9403442	A	19950317	NO 943442	A	19940915	199519	
JP 7095682	A	19950407	JP 93258993	A	19930924	199523	
CA 2131950	A	19950317	CA 2131950	A	19940913	199524	
EP 644525	A3	19951213	EP 94306755	A	19940915	199619	
JP 10244004	A	19980914	JP 93258993	A	19930924	199847	
			JP 9873083	A	19930924		
JP 10282983	A	19981023	JP 93252124	A	19930916	199902	
			JP 9846340	A	19930916		
JP 10295818	A	19981110	JP 93258973	A	19930924	199904	
			JP 9846345	A	19930924		
US 5954630	A	19990921	US 94305834	A	19940914	199945	
JP 3194187	B2	20010730	JP 93252124	A	19930916	200146	
			JP 9846340	A	19930916		

Priority Applications (No Type Date): JP 93258993 A 19930924; JP 93252124 A 19930916; JP 93258973 A 19930924; JP 9873083 A 19930924; JP 9846340 A 19930916; JP 9846345 A 19930924
Cited Patents: No-SR.Pub; 1.Jnl.Ref; FR 2569348; US 4227516; US 5123899
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 644525	A2	E	20	G10K-015/02	
Designated States (Regional): DE FR GB IT NL SE					
NO 9403442	A			A61B-005/12	
JP 7095682	A		20	H04R-003/00	
CA 2131950	A			G10K-015/02	
EP 644525	A3			G10K-015/02	
JP 10244004	A		12	A61M-021/02	Div ex application JP 93258993
JP 10282983	A		9	G10K-015/04	Div ex application JP 93252124
JP 10295818	A		12	A61M-021/02	Div ex application JP 93258973
US 5954630	A			A61M-021/00	
JP 3194187	B2		9	H04R-003/04	Div ex application JP 93252124 Previous Publ. patent JP 10282983

Abstract (Basic): EP 644525 A

The audible sound of modulated wave includes a very low- frequency wave of approx 20 Hertz or lower which is superimposed on an audio low-frequency wave which simulates FM theta in human **brain waves** .

The method further involves **amplitude** modulating an audio low-**frequency** with a very low-frequency wave of less than 20 Hertz, and subjecting to electro-acoustic transduction the obtained electrical signal which contains a modulated wave where the very low frequency signal is superimposed on the audio low-frequency wave.

USE/ADVANTAGE - Artificially generating FM theta in human brain waves to improve attention and concentration during mental tasks when

auditorialy administered.
Dwg.1/8
Title Terms: FM; THETA; INDUCE; AUDIBLE; SOUND; BRAIN; WAVE; MODULATE; WAVE ; LOW; FREQUENCY; WAVE; HERTZ; LESS; SUPERIMPOSED; AUDIO; LOW; FREQUENCY; WAVE
Derwent Class: P31; P34; P86; S05; W04
International Patent Class (Main): **A61B-005/12** ; A61M-021/00; A61M-021/02; G10K-015/02; G10K-015/04; H04R-003/00; H04R-003/04
International Patent Class (Additional): **A61B-008/00** ; A61N-005/00
File Segment: EPI; EngPI

12/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

004325110
WPI Acc No: 1985-151988/198525
XRPX Acc No: N85-114582
Oxygen intoxication diagnosis - by over 30 per cent increase in nystagmic reaction to caloric stimulation of vestibular apparatus
Patent Assignee: BELO NEUROLOGY RES (BNEO-R); MINSK CLINIC HOSPITAL (MICL-R)
Inventor: ANTONOV I P; SHALKEVICH V B; SKLYUT I A
Number of Countries: 001 Number of Patents: 001
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
SU 1128911	A	19841215	SU 3528291	A	19821223	198525	B

Priority Applications (No Type Date): SU 3528291 A 19821223
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
SU 1128911	A		2		

Abstract (Basic): SU 1128911 A
The condition of the vestibular apparatus is determined before treatment by caloric testing. The posterior superior wall of the external **auditory** meat is irrigated for 40 sec. The otocalorimeter used for the test should be an ultra thermostat with rubber tubes with tips attached to its output pipes. The caloric test is performed with the patient seated in a special chair. Electro-nystagmic recording is performed using a 4-channel **electroencephalograph** .
The head of the patient is bent aside to a 60 degree angle. The electrodes are applied bitemporally near the outer edge of the eye. The instrument used is calibrated, which makes it possible to calculate the **amplitude** of nysteagmus and angular **speed** of the slow phase. A strong nystagmic reflex response is indicated when there is an increase in the time of nystagmic reaction its **amplitude** slow phase angular **speed** and the degree of nystagmus.
USE - For early detection of oxygen intoxication. Bul.46/15.12.84
Dwg.0/0
Title Terms: OXYGEN; INTOXICATION; DIAGNOSE; PER; CENT; INCREASE; REACT; CALORIC; STIMULATING; VESTIBULAR; APPARATUS
Derwent Class: P31
International Patent Class (Additional): **A61B-010/00**
File Segment: EngPI

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Set     Items   Description
S1        347   EVOK???(2N)(POTENTIAL? ? OR RESPON???)
S2     306134   AUDIO? OR AUDITORY OR HEARING OR AURAL? OR SOUND? ?
S3       1890   ELECTROENCEPHALOGRA? OR ELECTRO()ENCEPHALOGRA? OR EEG OR B-
             RAIN(2N)WAVE? ?
S4         63   AEP
S5     169475   AMPLITUD? OR LOUD?
S6    2195113   FREQUENC? OR SPEED? ? OR RATE? ?
S7        285   S1(3N)S2 OR S2(S)S3 OR S4
S8          5   S5(5N)S6 AND S7
S9          5   S8 NOT COARS?
S10         2   S9 AND IC=A61B
S11         2   IDPAT (sorted in duplicate/non-duplicate order)
S12         2   IDPAT (primary/non-duplicate records only)
? show files
File 347:JAPIO Oct 1976-2002/Dec(Updated 030402)
         (c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200329
         (c) 2003  Thomson Derwent
File 371:French Patents 1961-2002/BOPI 200209
         (c) 2002 INPI.  All rts. reserv.
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Biblio patent – Coarseness

12/5/1 **(Item 1 from file: 350)**
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

012880842 **Image available**
WPI Acc No: 2000-052676/200004
XRPX Acc No: N00-041119

Evoked response audiometer **for diagnosing deafness in children at early stage**

Patent Assignee: UNIV MELBOURNE (UYME)
Inventor: COHEN L T; PARKER J C; RICKARDS F W

Number of Countries: 087 Number of Patents: 004
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9953839	A1	19991028	WO 99AU303	A	19990422	200004	B
AU 9933991	A	19991108	AU 9933991	A	19990422	200014	
EP 1073369	A1	20010207	EP 99915366	A	19990422	200109	
			WO 99AU303	A	19990422		
US 6406439	B1	20020618	WO 99AU303	A	19990422	200244	
			US 2000673233	A	20001201		

Priority Applications (No Type Date): AU 983137 A 19980422
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9953839	A1	E	30	A61B-005/12	
AU 9933991	A				Based on patent WO 9953839
EP 1073369	A1	E		A61B-005/12	Based on patent WO 9953839
US 6406439	B1			A61B-005/00	Based on patent WO 9953839

Designated States (National): AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW
Designated States (Regional): AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW NL OA PT SD SE SL SZ UG ZW
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

Bad Data

Abstract (Basic): WO 9953839 A1

NOVELTY - The audiometer supplies an auditory stimulus signal whose carrier **frequency** is modulated, to the patient for predetermined time period. The brain **potential** signals **evoked** by the **auditory** signal, are sampled and analyzed.

DETAILED DESCRIPTION - The auditory signal is presented long enough to enable phase locked, steady state potentials to be evoked in the patient's brain. The audiometer analyzes the brain potentials and determines whether phase locking of brain potentials to the auditory signal has occurred. Either of AM and FM is delayed with respect to the other, before the auditory signal is supplied to the patient, to enhance the **evoked response** to the **auditory** stimulus. An INDEPENDENT CLAIM is also included for the method of testing hearing impairment.

USE - In diagnosis of hearing impairment of children at early stage.

ADVANTAGE - Achieves enhanced response which is greater than that obtainable from stimulus with AM or FM alone. Obtains hearing threshold value that is close to true behavioral hearing threshold of the patient.

DESCRIPTION OF DRAWING(S) - The figure shows a graph of vector diagram showing **amplitude** versus phase, representing the response evoked in a patient.

pp; 30 DwgNo 12/17
Title Terms: RESPOND; AUDIOMETER; DIAGNOSE; CHILD; EARLY; STAGE
Derwent Class: P31; S05
International Patent Class (Main): **A61B-005/00 ; A61B-005/12**
File Segment: EPI; EngPI

12/5/2 (Item 2 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

010215912 **Image available**
WPI Acc No: 1995-117166/199516
XRPX Acc No: N95-092449
FM theta-inducing audible sound **in** brain waves **- using modulated wave with very low** frequency **wave of approx 20 Hertz or less superimposed on** audio **low-** frequency **wave**
Patent Assignee: HAYASHIBARA K (HAYA-I)
Inventor: MASAKI K; MATSUDA O
Number of Countries: 010 Number of Patents: 010
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 644525	A2	19950322	EP 94306755	A	19940915	199516	B
NO 9403442	A	19950317	NO 943442	A	19940915	199519	
JP 7095682	A	19950407	JP 93258993	A	19930924	199523	
CA 2131950	A	19950317	CA 2131950	A	19940913	199524	
EP 644525	A3	19951213	EP 94306755	A	19940915	199619	
JP 10244004	A	19980914	JP 93258993	A	19930924	199847	
			JP 9873083	A	19930924		
JP 10282983	A	19981023	JP 93252124	A	19930916	199902	
			JP 9846340	A	19930916		
JP 10295818	A	19981110	JP 93258973	A	19930924	199904	
			JP 9846345	A	19930924		
US 5954630	A	19990921	US 94305834	A	19940914	199945	
JP 3194187	B2	20010730	JP 93252124	A	19930916	200146	
			JP 9846340	A	19930916		

Priority Applications (No Type Date): JP 93258993 A 19930924; JP 93252124 A 19930916; JP 93258973 A 19930924; JP 9873083 A 19930924; JP 9846340 A 19930916; JP 9846345 A 19930924
Cited Patents: No-SR.Pub; 1.Jnl.Ref; FR 2569348; US 4227516; US 5123899
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 644525	A2	E	20	G10K-015/02	
Designated States (Regional): DE FR GB IT NL SE					
NO 9403442	A			A61B-005/12	
JP 7095682	A		20	H04R-003/00	
CA 2131950	A			G10K-015/02	
EP 644525	A3			G10K-015/02	
JP 10244004	A		12	A61M-021/02	Div ex application JP 93258993
JP 10282983	A		9	G10K-015/04	Div ex application JP 93252124
JP 10295818	A		12	A61M-021/02	Div ex application JP 93258973
US 5954630	A			A61M-021/00	
JP 3194187	B2		9	H04R-003/04	Div ex application JP 93252124 Previous Publ. patent JP 10282983

Abstract (Basic): EP 644525 A
The audible sound of modulated wave includes a very low- **frequency** wave of approx 20 Hertz or lower which is superimposed on an audio low- **frequency** wave which simulates FM theta in human **brain waves** .
The method further involves **amplitude** modulating an audio low-

frequency with a very low- **frequency** wave of less than 20 Hertz, and subjecting to electro-acoustic transduction the obtained electrical signal which contains a modulated wave where the very low **frequency** signal is superimposed on the audio low- **frequency** wave.

USE/ADVANTAGE - Artificially generating FM theta in human brain waves to improve attention and concentration during mental tasks when auditorialy administered.

Dwg.1/8

Title Terms: FM; THETA; INDUCE; AUDIBLE; SOUND; BRAIN; WAVE; MODULATE; WAVE ; LOW; **FREQUENCY** ; WAVE; HERTZ; LESS; SUPERIMPOSED; AUDIO; LOW; **FREQUENCY** ; WAVE

Derwent Class: P31; P34; P86; S05; W04

International Patent Class (Main): **A61B-005/12** ; A61M-021/00; A61M-021/02; G10K-015/02; G10K-015/04; H04R-003/00; H04R-003/04

International Patent Class (Additional): **A61B-008/00** ; A61N-005/00

File Segment: EPI; EngPI

12/5/3 (Item 3 from file: 350)

DIALOG(R)File 350:Derwent WPIX
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010097923 **Image available**

WPI Acc No: 1994-365636/199445

Related WPI Acc No: 1995-160672; 1996-009720

XRPX Acc No: N94-286361

Multi-faceted electroencephalographic response analysis method - detecting concealed information in brain by presenting stimuli to subject and recording and analysing multiple features of brain responses

Patent Assignee: FARWELL L A (FARW-I); CONTE F L (CONT-I)

Inventor: FARWELL L A

Number of Countries: 024 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 5363858	A	19941115	US 9316215	A	19930211	199445	B
			US 9357607	A	19930505		
WO 9426162	A1	19941124	WO 94US4851	A	19940503	199501	
AU 9480501	A	19941212	AU 9480501	A	19940503	199521	

Priority Applications (No Type Date): US 9357607 A 19930505; US 9316215 A 19930211

Cited Patents: US 4949726; US 5170780

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 5363858	A		20	A61B-005/04	CIP of application US 9316215
WO 9426162	A1	E	41	A61B-005/04	

Designated States (National): AU BR CA CN JP KR RU

Designated States (Regional): AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE

AU 9480501	A		A61B-005/04	Based on patent WO 9426162

Abstract (Basic): US 5363858 A

The method for multifaceted **electroencephalographic** response analysis (MERA) involves presenting stimuli to a subject through at least one of the visual and **auditory** modalities, recording electrophysiological brain responses indicative of information processing in response to the stimuli, and analyzing multiple features of the brain responses.

The memory and encoding related multifaceted electroencephalographic response (MERMER), a particular brain response

elicited by, and unfolding within two seconds of the onset of, noteworthy stimuli, involving an electrically positive aspect generally maximal parietally followed by an electrically negative aspect with substantial frontal **amplitude** , and also involving characteristic changes in the **frequency** domain, is detected, analyzed, and applied for the above stated purposes.

USE/ADVANTAGE - To detect concealed information in brain and communicate directly from brain to computer, and thus to command computers and also to command mechanical devices.

Dwg.6/6

Title Terms: MULTI; FACET; EEG; RESPOND; ANALYSE; METHOD; DETECT; CONCEAL; INFORMATION; BRAIN; PRESENT; STIMULUS; SUBJECT; RECORD; ANALYSE; MULTIPLE ; FEATURE; BRAIN; RESPOND

Derwent Class: P31; S05

International Patent Class (Main): **A61B-005/04**

File Segment: EPI; EngPI

12/5/4 (Item 4 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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008212220 **Image available**

WPI Acc No: 1990-099221/199013

XRPX Acc No: N90-076682

Physiological feedback system e.g. neuro-acoustics - senses EEG signals which are converted to music and applies music to condition desired EEG activity

Patent Assignee: NEUROSONICS INC (NEUR-N)

Inventor: KNISPEL J; WRIGHT G

Number of Countries: 016 Number of Patents: 009

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
WO 9001897	A	19900308	WO 88US2725	A	19880817	199013	B
AU 8823039	A	19900323	AU 8823039	A	19880817	199033	
EP 432152	A	19910619	EP 88907930	A	19880817	199125	
JP 4501214	W	19920305	JP 88507290	A	19880817	199216	
AU 636287	B	19930429	AU 8823039	A	19880817	199324	N
CA 1322026	C	19930907	CA 575147	A	19880818	199342	N
EP 432152	A4	19911030	EP 88907930	A	19880000	199519	
EP 432152	B1	19950705	EP 88907930	A	19880817	199531	
			WO 88US2725	A	19880817		
DE 3854131	G	19950810	DE 3854131	A	19880817	199537	
			EP 88907930	A	19880817		
			WO 88US2725	A	19880817		

Priority Applications (No Type Date): WO 88US2725 A 19880817; CA 575147 A 19880818

Cited Patents: No-Citns.; US 3753433; US 3837331; US 3855998; US 4227516; US 4335710; US 4454886

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 9001897	A	E	67		
Designated States (National): AU DK FI JP KR NO					
Designated States (Regional): AT BE CH DE FR GB IT NL SE					
EP 432152	A				
Designated States (Regional): AT BE CH DE DK FI FR GB IT NL SE					
JP 4501214	W		19		Based on patent WO 9001897
AU 636287	B			A61B-005/16	Previous Publ. patent AU 8823039
					Based on patent WO 9001897
EP 432152	B1	E	28	A61B-005/04	Based on patent WO 9001897

Designated States (Regional): DE FR GB IT NL
DE 3854131 G A61B-005/04 Based on patent EP 432152
Based on patent WO 9001897
CA 1322026 C A61B-005/04

Abstract (Basic): WO 9001897 A

An EEG-sensing cup electrode (3) is applied to the cranium of the subject (1) at the CZ or P3 location, to reinforce alpha activity and to promote relaxation. In response to the sensed activity, an EEG monitor and channel conditioner (5) derives a signal of **frequency** 0.5 to thirty-five hertz which correponds to brain activity.

The signal is delayed (7) by a delay line of which the delay is regulated by an **EEG** analysis unit (8). The delayed signal is passed to on **EEG** signal analysis processor (9) which produces signals which are converted to music by a **sound** synthesiser (10). The music is applied through headplaces (11) to the ears of the subject. Thus, the music drives the brain into resonance with the music to provide a closed loop.

USE - To induce controlled physiological and pychological response.

Dwg.1/14

Title Terms: PHYSIOLOGICAL; FEEDBACK; SYSTEM; NEURO; ACOUSTIC; SENSE; EEG; SIGNAL; CONVERT; MUSIC; APPLY; MUSIC; CONDITION; EEG; ACTIVE
Index Terms/Additional Words: EEG
Derwent Class: P31; S05
International Patent Class (Main): **A61B-005/04 ; A61B-005/16**
International Patent Class (Additional): **A61B-005/0482**
File Segment: EPI; EngPI

12/5/5 (Item 5 from file: 350)
DIALOG(R)File 350:Derwent WPIX
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007885908 **Image available**
WPI Acc No: 1989-151020/198921
XRPX Acc No: N89-115377

Audiometer for sleeping subjects - has signal supply controlled by computer programmed to select most appropriate modulation frequency **for each stimulus** frequency

Patent Assignee: UNIV MELBOURNE (UYME)
Inventor: COHEN L T
Number of Countries: 002 Number of Patents: 002
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
AU 8825091	A	19890406	AU 8825091	A	19881111	198921 B
US 5023783	A	19910611	US 90534356	A	19900608	199126

Priority Applications (No Type Date): AU 875454 A 19870910; AU 8825091 A 19881111
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
AU 8825091	A		45		

Abstract (Basic): AU 8825091 A

The **evoked response audiometer** comprises a device for supplying to a sleeping patient an auditory signal consisting of a carrier **frequency** which is periodically modulated such that the stimulus is **frequency** specific. The auditory signal is presented for a sufficiently extended period of time to enable phase-locked

steady-state potentials to be evoked in the brain.

The brain potential signals evoked by the signal are sampled and analysed to determine whether phase-locking of the potentials to the modulated auditory signal has occurred. The auditory signaller is controlled so that the auditory signals are periodically modulated at **frequencies** in excess of 60 Hz, the **frequency** of modulation being varied in a generally increasing manner for auditory signals of higher **frequencies** .

USE - Diagnosis of deafness in young children.

1/15

Title Terms: AUDIOMETER; SLEEP; SUBJECT; SIGNAL; SUPPLY; CONTROL; COMPUTER; PROGRAM; SELECT; APPROPRIATE; MODULATE; **FREQUENCY** ; STIMULUS; **FREQUENCY**

Derwent Class: P31; S05
International Patent Class (Additional): **A61B-005/12**
File Segment: EPI; EngPI

12/5/6 (Item 6 from file: 350)
DIALOG(R)File 350:Derwent WPIX
(c) 2003 Thomson Derwent. All rts. reserv.

007417558 **Image available**
WPI Acc No: 1988-051493/198808
XRPX Acc No: N88-039079

Automated visual testing appts. - has controller producing alternating test image for analysis and displays brain potentials using lens system preventing eye adaption

Patent Assignee: WESTINGHOUSE ELECTRIC CORP (WESE)
Inventor: HANES L F; SCHMIDT A L; SHERWIN G W
Number of Countries: 012 Number of Patents: 005
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
EP 256738	A	19880224	EP 87306853	A	19870803	198808	B
CN 8705377	A	19880323				198919	
US 4861154	A	19890829	US 86893758	A	19860806	198944	
US 4953968	A	19900904	US 89327046	A	19890322	199038	
US 5052401	A	19911001	US 89327047	A	19890322	199142	

Priority Applications (No Type Date): US 86893758 A 19860806; US 89327046 A 19890322; US 89327047 A 19890322
Cited Patents: A3...8929; EP 199218; No-SR.Pub; US 3574450; US 4181407
Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
EP 256738	A	E	50		
Designated States (Regional): BE CH DE ES FR GB IT LI NL SE					
US 4861154	A		49		

Abstract (Basic): EP 256738 A

A patient (27) is presented with a chessboard pattern (20), reversed at a **frequency** of 6Hz, which he views through an optical system (24 to 52) which includes selectable and controllable lenses, filter, and polarizer. Electroencephalographic electrodes pick up the resulting brain potentials, which are amplified (54), the signal at the pattern reversal **frequency** being analysed and displayed.

Eye adaptation to the changing focus chessboard pattern is prevented by the use of a superimposed video (48) reference image placed at infinity by a lens (50) and providing the majority of the image viewed by the patient.

USE/ADVANTAGE - Testing spherical and aspherical refractometry,

contrast and colour sensitivity, acuity, and visual pathway disfunction. Avoids need for verbal response from patient

Title Terms: AUTOMATIC; VISUAL; TEST; APPARATUS; CONTROL; PRODUCE; ALTERNATE; TEST; IMAGE; ANALYSE; DISPLAY; BRAIN; POTENTIAL; LENS; SYSTEM; PREVENT; EYE; ADAPT

Derwent Class: P31; S05

International Patent Class (Additional): **A61B-003/02** ; **A61B-005/04**

File Segment: EPI; EngPI

12/5/7 (Item 7 from file: 350)

DIALOG(R)File 350:Derwent WPIX

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004061179

WPI Acc No: 1984-206720/198433

XRPX Acc No: N84-154541

Evoked response audiometer **using continuous phase-locked potentials - is for early diagnosis of deafness and records potentials of vertex and mastoids of patient**

Patent Assignee: UNIV MELBOURNE (UYME)

Inventor: RICKARDS F W

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week	
US 4462411	A	19840731	US 82337397	A	19820106	198433	B

Priority Applications (No Type Date): AU 817169 A 19810107

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
US 4462411	A		8		

Abstract (Basic): US 4462411 A

The patient is presented with a continuous **auditory** signal which is **amplitude** modulated and the resulting brain potentials of the patient (**EEG**) are recorded. The potentials are amplified, filtered and averaged over a number of sampling periods. The averaged signals are analysed to determine the **amplitude** and phase of the main components of the response to determine whether phase locking has occurred.

The phase of the main components is plotted against variation of the modulating **frequency** and the gradient of the plot provides the latency of the response from which neurological and other factors of significance to the hearing of the patient may be determined. The sound pressure level of the auditory signal is also varied and the **amplitude** and phase of the response plotted against these changes to provide an indication of the sensitivity of the hearing of the patient.

ADVANTAGE - Has improved signal-to-noise ratio and enables measurement of low **frequency** hearing information.

0/5

Title Terms: RESPOND; AUDIOMETER; CONTINUOUS; PHASE; LOCK; POTENTIAL; EARLY ; DIAGNOSE; RECORD; POTENTIAL; VERTEX; PATIENT

Derwent Class: P31; S05

International Patent Class (Additional): **A61B-005/04**

File Segment: EPI; EngPI

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Set     Items   Description
S1        347   EVOK???(2N)(POTENTIAL? ? OR RESPON???)
S2     305879   AUDIO? OR AUDITORY OR HEARING OR AURAL? OR SOUND? ?
S3       1887   ELECTROENCEPHALOGRA? OR ELECTRO()ENCEPHALOGRA? OR EEG OR B-
            RAIN(2N)WAVE? ?
S4         63   AEP
S5      56404   COARSENESS OR (AMPLITUDE? ? AND FREQUEN?)
S6        285   S1(3N)S2 OR S2(S)S3 OR S4
S7         13   S6 AND S5
S8          7   S7 AND IC=A61B
S9          6   S7 NOT S8
S10         7   S8
S11         7   IDPAT (sorted in duplicate/non-duplicate order)
S12         7   IDPAT (primary/non-duplicate records only)
? show files
File 347:JAPIO Oct 1976-2002/Dec(Updated 030402)
         (c) 2003 JPO & JAPIO
File 350:Derwent WPIX 1963-2003/UD,UM &UP=200328
         (c) 2003  Thomson Derwent
File 371:French Patents 1961-2002/BOPI 200209
         (c) 2002 INPI.  All rts. reserv.
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FT Patents – Freq & Amp.

11/5,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.

00966587 **Image available**
METHODS AND APPARATUS FOR MONITORING CONSCIOUSNESS
Patent Applicant/Assignee:
COMPUMEDICS LIMITED, 1 Marine Parade, Abbotsford, Victoria 3067, AU, AU (Residence), AU (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
BURTON David, 62 Broadway, Camberwell, Victoria 3124, AU, AU (Residence), AU (Nationality), (Designated only for: US)
ZILBERG Eugene, 6 Holloway Road, Sandringham, Victoria 3191, AU, AU (Residence), AU (Nationality), (Designated only for: US)
Legal Representative:
PHILLIPS ORMONDE & FITZPATRICK (agent), 367 Collins Street, Melbourne, Victoria 3000, AU,
Patent and Priority Information (Country, Number, Date):
Patent: WO 2002100267 A1 20021219 (WO 02100267)
Application: WO 2002AU776 20020613 (PCT/WO AU0200776)
Priority Application: US 2001298011 20010613
Bad Data
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **A61B-005/0476**
International Patent Class: **A61B-005/0478 ; A61B-005/048 ; A61B-005/0482 ; A61B-005/0484 ; A61B-005/11**
Publication Language: English
Filing Language: English

English Abstract
The application discloses several inventions as follows: (a) a method of monitoring consciousness of a sentient subject and automatically detecting transition states by obtaining an EEG signal and comparing the two signals to detect the transition and provide a warning signal when the transition occurs; (b) a method or apparatus for processing a non-stationary signal including segments having increasing and decreasing amplitude representing physiological characteristics of a sentient subject by performing syntactic analysis of segments, comparing height, width and error parameters of segments to identify noise segments and replacing noise segments with a straight line before classifying the signal as belonging to one of predefined sleep states; (c) a method of monitoring physiological characteristics of a sentient subject including substitution of a degraded first electrode signal by a second spare electrode signal and providing a warning signal when both signals are degraded; and (d) a capacitive or inductive element sensor for detecting the degree of opening of the eyelid including signal providing means indicative of the relative positions between a component movable with the eyelid and a reference component.

Legal Status (Type, Date, Text)
Publication 20021219 A1 With international search report.

Detailed Description
... optimised bi-spectral analysis and optimised AEP analysis. Phase based analysis may be combined with **frequency** band - **amplitude** analysis (spectral analysis) to provide an improvement on phase only or frequency based analysis (refer...the AEPindex is derived for that patient under the most stable and reliable AEP stimulus **frequency** and **amplitude** conditions on an individual patient by patient basis. These same principals can be used for...

11/5,K/2 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
(c) 2003 WIPO/Univentio. All rts. reserv.

00928021 **Image available**
FETAL BRAIN MONITOR
MONITEUR DE CERVEAU FOETAL
Patent Applicant/Assignee:
NEW YORK UNIVERSITY, 70 Washington Square South, New York, NY 10012, US, US (Residence), US (Nationality)
Inventor(s):
PRICHEP Leslie S, 1010 Orienta Avenue, Mamaroneck, NY 10543, US,
Legal Representative:
FAY Patrick J (et al) (agent), Fay Kaplun & Marcin, LLP, 100 Maiden Lane, 17th Floor, New York, NY 10038, US,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200260313 A2-A3 20020808 (WO 0260313)
Application: WO 2001US51219 20011113 (PCT/WO US0151219)
Priority Application: US 2000716517 20001120
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **A61B-005/04**
International Patent Class: **A61B-005/00** ; A61N-001/08; A61N-001/18; A61N-001/32; A61N-001/40
Publication Language: English
Filing Language: English

Bad Data

English Abstract
A fetal Brain Monitor (FBM) (14) utilizes a transducer (10) which is placed on the abdomen (11) of a mother and which is pulsed to generate auditory sounds, i.e., clicks, to provide auditory brainstem evoked responses (BAER) of a fetus within the mother's uterus. The fetus' brain waves are detected by a biosensor (15), amplified (17), converted to digital data (10), and analysed, in one embodiment, using a digital comb filter to improve the signal/noise ratio. The computer system uses QEEG (Quantitative EEG) to compare the data from the fetus to normative data or to prior states of the fetus' own data (self-norm).

Legal Status (Type, Date, Text)
Publication 20020808 A2 Without international search report and to be

republished upon receipt of that report.
Search Rpt 20021107 Late publication of international search report
Republication 20021107 A3 With international search report.
Republication 20021107 A3 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
Examination 20030213 Request for preliminary examination prior to end of 19th month from priority date

Detailed Description.
... Brain Monitor (FBM) of the present invention; Figure 2 is a chart showing normal Brainstem **Auditory Evoked Response** (BAER); and Figure 3 is a chart comparing normal and abnormal BAERs, The details of...driven by the stimulator 13 (stimulus generator) of the FBM (Fetal Brain Monitor) 14, The **rate , amplitude** 'and duration of the sound pulses are preferably similar to those used for BAER monitoring...

...known, This maximum repetition rate is a limiting factor on the speed with which Brainstem **Auditory Evoked Response** (BAER) might be acquired from a fetus. The transducer may deliver rarifaction, condensation or filtered...

11/5,K/3 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00855579 **Image available**
SYSTEM AND METHOD FOR OBJECTIVE EVALUATION OF HEARING USING AUDITORY STEADY-STATE RESPONSES

Patent Applicant/Inventor:
JOHN Michael Sasha, Apt. #12, 1420 Dundas Street, Toronto, Ontario M6J 1Y5, CA, CA (Residence), US (Nationality)
PICTON Terence W, 79 Burnett Avenue, Toronto, Ontario M2N 1V4, CA, CA (Residence), CA (Nationality)
Legal Representative:
BERESKIN & PARR (agent), 40 King Street West, 40th Floor, Toronto, Ontario M5H 3Y2, CA,

Patent and Priority Information (Country, Number, Date):
Patent: WO 200187147 A2-A3 20011122 (WO 0187147)
Application: WO 2001CA715 20010518 (PCT/WO CA0100715)
Priority Application: US 2000205469 20000519; US 2000247999 20001114; US 2001287387 20010501
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **A61B-005/0484**
International Patent Class: **A61B-005/12**
Publication Language: English
Filing Language: English

Bad Data

English Abstract
This invention relates to an apparatus and method for assessing a

subject's hearing by recording steady-state **auditory evoked responses** . The apparatus generates a steady-state **auditory evoked potential** stimulus, presents the stimulus to the subject, senses potentials while simultaneously presenting the stimulus and determines whether the sensed potentials contain responses to the stimulus. The stimulus may include an optimum vector combined **amplitude** modulation and **frequency** modulation signal adjusted to evoke responses with increased **amplitudes** , an independent **amplitude** modulation and **frequency** modulation signal and a signal whose envelope is modulated by an exponential modulation signal. The apparatus is also adapted to reduce noise in the sensed potentials by employing sample weighted averaging. The apparatus is also adapted to detect responses in the sensed potentials via the Phase weighted T-test or Phase zone technique. The apparatus may further perform a number of objective audiological tests including latency tests, AM/FM discrimination tests, rate sensitivity tests, aided hearing tests, depth sensitivity tests, supra-threshold tests and auditory threshold tests. The apparatus is further adapted to perform multi-modality testing in which more than one sensory modality of the subject is tested simultaneously.

Legal Status (Type, Date, Text)
Publication 20011122 A2 Without international search report and to be republished upon receipt of that report.
Search Rpt 20020314 Late publication of international search report
Republication 20020314 A3 With international search report.

Detailed Description
... 13 Figure 5a is a plot illustrating how the response to an SSAEP stimulus containing **amplitude** modulated and **frequency** modulated components can be modeled as the vector addition of the SSAEP response to the...

...stimulus; Figure 5b is a graph illustrating how the response to an SSAEP stimulus containing **amplitude** modulated and **frequency** modulated components can be modeled as a sinusoid when the phase of the frequency modulated...

11/5,K/4 (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00802666 **Image available**
INTERACTIVE-MODIFIED INTERACTIVE EVENT RELATED POTENTIAL (IMIERP)
POTENTIEL LIE A UN EVENEMENT INTERACTIF MODIFIE PAR INTERACTON (IMIERP)
Patent Applicant/Assignee:
THE STATE OF QUEENSLAND - QUEENSLAND HEALTH, Queensland Health Building, 147-163 Charlotte St, Brisbane, Queensland 4076, AU, AU (Residence), AU (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
PRICE Gregory, 15 Carbeen Court, Mt Crosby, Queensland 4306, AU, AU (Residence), AU (Nationality)
Patent and Priority Information (Country, Number, Date):
Patent: WO 200135824 A1 20010525 (WO 0135824)
Application: WO 2000AU1374 20001108 (PCT/WO AU0001374)
Priority Application: AU 994048 19991115
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ

Bad Date

DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ
LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG
SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **A61B-005/0484**
International Patent Class: **A61B-005/0482**
Publication Language: English
Filing Language: English

English Abstract
A method modifying a particular electrophysiological feature generated in response to a stimulus is disclosed. The method involves a repeated process of: sampling the brain wave state in order to apply a modifying pulse; modifying the brain wave state to a state more conducive to a required response; sampling the brain wave state in order to apply a response stimulus; applying a stimulus only when the brain wave state substantially meets the preselected response criteria; recording the brain wave activity of the subject subsequent to the application of the stimulus.

Legal Status (Type, Date, Text)
Publication 20010525 A1 With international search report.
Publication 20010525 A1 Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

Claim
... Wright et aL 1990 "Inverse filter computation of the neural impulse giving rise to the **auditory evoked potential** ", Brain Topograpky, 2 293-302). A number of authors have previously described effects of pre...
to investigate a mental dysfunction. Suitably the pre-selected criteria include a selected threshold **amplitude** . **frequency** distribution andJor wave shape of background brain wave activity. 5 Preferably, the comparing step employs...stimulus may varied for each stli-nulus application. Variation may involve sensory parameters such as **amplitude** , period. **frequency** , or location. The stimulus modality may also be varied (e.g. visual, electrical or TMS...

11/5,K/5 (Item 5 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00522487 **Image available**
PHASE LOCK EVOKED RESPONSE AUDIOMETER
AUDIOMETRE ELECTROPHYSIOLOGIQUE A VERROUILLAGE DE PHASE
Patent Applicant/Assignee:
THE UNIVERSITY OF MELBOURNE,
COHEN Lawrence Thomas,
PARKER John Charles,
RICKARDS Field Winston,
Inventor(s):
COHEN Lawrence Thomas,
PARKER John Charles,

RICKARDS Field Winston,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9953839 A1 19991028
Application: WO 99AU303 19990422 (PCT/WO AU9900303)
Priority Application: AU 983137 19980422
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Main International Patent Class: **A61B-005/12**
Publication Language: English

Bad Data

English Abstract

An **evoked response audiometer** method and apparatus in which a patient receives an auditory stimulus signal comprising a carrier **frequency** which is periodically **amplitude** modulated and **frequency** modulated whereby the stimulus is at least substantially frequency specific, the brain potential signals of the patient evoked by the auditory signal being sampled to determine whether phase locking to the modulated auditory signal has occurred, the auditory signal being selectively controlled to advance or delay one modulation with respect to the other modulation to cause enhancement of the **evoked response** to the **auditory** stimulus (Figs. 12 to 15).

Detailed Description

... Nos 4,462,411 (Rickards) and 5,023,783 (Cohen and Rickards), we have described **evoked response audiometers** which use a continuous auditory tone that is **frequency** or **amplitude** modulated, the auditory tone being presented for a sufficiently extended period of time to enable...that the vectorial sum is significantly enhanced beyond the stimulus achieved by the use of **amplitude** modulation or **frequency** modulation alone. This enhancement results in a higher detection sensitivity to the stimulus by virtue...

...an improved signal to noise ratio, and consequently, the hearing threshold determined when using the **evoked response audiometer** much closer to the true behavioural hearing threshold of the patient under test. As a...FM modulation for the time waveforms of Figures 3 and 4 respectively, with the relative **amplitudes** in dB shown against **frequency** ; Figure 9 illustrates the envelopes for the spectra of AWFM modulation for the time waveforms of Figures 5 and 6 respectively, with the relative **amplitudes** in dB shown against **frequency** ; Figures 1 0 and 1 1 illustrate the gain or loss expected in dB when...

...16 illustrates graphs of animal tests showing the difference in phase in radians between the **auditory** stimulus and the **evoked response** and the frequency of the carrier at a modulation frequency of 140 Hz, and
Figure...

11/5,K/6 (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00420240 **Image available**

ANAESTHESIA CONTROL SYSTEM
SYSTEME DE REGULATION D'ANESTHESIE

Patent Applicant/Assignee:
THE UNIVERSITY COURT OF THE UNIVERSITY OF GLASGOW,
MANTZARIDIS Haralambos,
KENNY Gavin Nicholson Cleghorn,
Inventor(s):
MANTZARIDIS Haralambos,
KENNY Gavin Nicholson Cleghorn,

the patent

Patent and Priority Information (Country, Number, Date):
Patent: WO 9810701 A1 19980319
Application: WO 97GB2435 19970910 (PCT/WO GB9702435)
Priority Application: GB 9618998 19960911
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG
Main International Patent Class: **A61B-005/11**
Publication Language: English

English Abstract
An anaesthesia control system and a method of calculating an index representative of the depth of anaesthesia is disclosed. The method comprises subjecting a patient to a repetitive audio stimulus and monitoring auditory evoked potentials (AEP) produced by the patient and then recording these auditory evoked potentials using EEG recording means and providing a signal corresponding to the coarseness of the monitored AEP signal and using this signal as an index indicative of anaesthetic depth. The raw AEP signal is divided into a series of sweeps and each sweep is synchronised with the repetitive audio stimulus and sweeps are recorded in sequence to produce a time averaged sweep from which the anaesthetic index is calculated. The anaesthetic index is constantly updated by repeatedly conducting a successive series of sweeps. The system and index signal can be used as part of an anaesthesia control system for regulating the supply of anaesthetic to the patient to maintain the anaesthetic index at a predetermined level.

11/5,K/7 (Item 7 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00168452 **Image available**
APPARATUS FOR TRANSLATING THE EEG INTO MUSIC
APPAREIL POUR TRANSCRIRE EN MUSIQUE L'ELECTROENCEPHALOGRAMME

Patent Applicant/Assignee:
NEUROSONICS INC,
Inventor(s):
KNISPEL Joel,
WRIGHT Geoffrey,

Patent and Priority Information (Country, Number, Date):
Patent: WO 9001897 A1 19900308
Application: WO 88US2725 19880817 (PCT/WO US8802725)
Priority Application: WO 88US2725 19880817
Designated States: AT AU BE CH DE DK FI FR GB IT JP KR NL NO SE

Main International Patent Class: **A61B-005/04**
Publication Language: English

English Abstract

A method and apparatus for applying a musical feedback signal to the human brain, or any other brain, to induce controllable psychological and physiological responses. A signal representing the ongoing electroencephalographic (EEG) signal of a brain preferably is obtained from the electrode (3) location on the scalp known as CZ or P3 in clinical notation. A signal processor (9) converts the ongoing EEG into electrical signals which are converted into music by synthesizers (10). The music is acoustically fed back to the brain after a time delay (7) calculated to shift the phase of the feedback in order to reinforce specific or desired ongoing EEG activity from the scalp position of interest. The music is comprised of at least one voice that follows the moment-by moment contour of the EEG in real time to reinforce the desired EEG activity. The music drives the brain into resonance with the music to provide a closed loop or physiological feedback effect.

Claim

... fourth musical voice comprises means for generating a series of notes in sequence at a **rate** determined by the **amplitude** of said ongoing EEG signal. - 44 22* A biofeedback apparatus as claimed in Claim 21...

...generating said fourth voice comprises means for not generating said sequence rate at a slower **rate** unless the **amplitude** of said ongoing EEG signal exceeds said first threshold level. 23* A biofeedback apparatus as...second voice comprises means for modulating the pitch of said bell sound around a center **frequency** in proportion to said **amplitude** of said ongoing EEG signal. - 45 26a A biofeedback apparatus as claimed in Claim 23...

```
Set     Items   Description
S1       2453   EVOK???(2N)(POTENTIAL? ? OR RESPON???)
S2     113393   AUDIO? OR AUDITORY OR HEARING OR AURAL? OR SOUND? ?
S3       2903   ELECTROENCEPHALOGRA? OR ELECTRO()ENCEPHALOGRA? OR EEG OR B-
            RAIN(2N)WAVE? ?
S4        768   AEP
S5     114750   AMPLITUD? OR LOUD?
S6     738266   FREQUENC? OR SPEED? ? OR RATE? ?
S7        931   S1(3N)S2 OR S2(5N)S3 OR S4
S8         40   S5(5N)S6 AND S7 AND IC=A61B
S9          7   S5(5N)S6(S)S7 AND IC=A61B
S10         7   IDPAT (sorted in duplicate/non-duplicate order)
S11         7   IDPAT (primary/non-duplicate records only)
? show files
File 348:EUROPEAN PATENTS 1978-2003/Apr W04
         (c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20030501,UT=20030424
         (c) 2003 WIPO/Univentio
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FT patents - Coarseness

11/5,K/1 (Item 1 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00880019 **Image available**
METHOD AND APPARATUS FOR REDUCING CONTAMINATION OF AN ELECTRICAL SIGNAL

Patent Applicant/Assignee:
THE REGENTS OF THE UNIVERSITY OF CALIFORNIA, 1111 Franklin Street, 12th floor, Oakland, CA 94607, US, US (Residence), US (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
COHEN Mark S, 916 Camino Colibri, Calabasas, CA 91302, US, US (Residence), US (Nationality), (Designated only for: US)
Legal Representative:
CANADY Karen S (agent), Gates & Cooper LLP, Suite 1050, 6701 Center Drive West, Los Angeles, CA 90045, US,

Patent and Priority Information (Country, Number, Date):
Patent: WO 200213689 A2 20020221 (WO 0213689)
Application: WO 2001US25480 20010815 (PCT/WO US0125480)
Priority Application: US 2000225389 20000815; US 2001267337 20010207
Designated States: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW
(EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
(OA) BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **A61B-005/00**
Publication Language: English
Filing Language: English

Bad Date

English Abstract
The method of reducing contamination of electrical signals recorded in the presence of repeated interference contamination comprises obtaining an electrical signal recorded in the presence of a contaminating signal, and detecting a timing signal that occurs at a fixed time point during the electrical signal relative to the onset of the contaminating signal. The electrical signal is digitized, wherein the digitizing begins with the timing signal. A plurality of digitized electrical signals is analyzed, wherein the electrical signals are synchronized with respect to the timing signal, to obtain an estimated contaminating signal that is subtracted from the digitized electrical signal. This method can be used with electrophysiological signals, such as **EEG** , ECG, EMG and galvanic skin response, and for elimination of noise associated with concurrently used methods such as MRI. The method of noise reduction is applicable to recordings of other electrical signals, including **audio** recordings.

Legal Status (Type, Date, Text)
Publication 20020221 A2 Without international search report and to be republished upon receipt of that report.
Examination 20020418 Request for preliminary examination prior to end of 19th month from priority date

Detailed Description
... collection that are particularly suited for minimizing artifacts and optimizing signal-tonoise in simultaneous tecording of

electroencephalographic (**EEG**) and Magnetic Resonance Imaging (MRI) signals, as well as other environments in which electrical signals...

...including eletromyelographic (EMG), electrocardiographic (ECG) or galvanic skin resistance (GSR) signals recording during fMRI and **audio** recordings or transmissions in the presence of 60 Hz noise or electrical transients.

...MRI. Although the examples described in detail herein address the application of thernethod torecotding an **EEG** in the presence of fN4RI, those skilled in the art of signal processing will appreciate...

...method of noise -reduction is applicable to -recordings of other electrical signals, including, for example, **audiorecotdings** , wherein it is desired to -reduce or eliminate one or mote sources of repeated contamination...

...significantly below the cortical surface. For example, attempts to localize the generators of the brainstem **auditory** 5 **evoked response** by simultaneous recording with depth electrodes or correlation with lesions have been conclusive for only...

...1930). By 1930 Berger had described what he called the alpha rhythm, being relatively high **amplitude** oscillations in the -range between 8 and 12 Hz that were associatedwith drowsiness. It is...that might expose sleep physiology as a marker for these problems. But, due to the **coarse** temporal resolution of PET and SPECT (Nofzinger, Mintun et al. 1998) and the relatively rapid...

11/5,K/2 (Item 2 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00841088 **Image available**
MONITORING AUDITORY EVOKED POTENTIALS
CONTROLE DE POTENTIELS EVOQUES AUDITIFS
Patent Applicant/Assignee:
DANMETER A S, Kildemosevej 13, DK-5000 Odense C, DK, DK (Residence), DK (Nationality), (For all designated states except: US)
Patent Applicant/Inventor:
JENSEN Erik Weber, Joan Coromines 37, ES-08395 San Pol De Mar, ES, ES (Residence), DK (Nationality), (Designated only for: US)
Legal Representative:
LARSEN & BIRKEHOLM A S (agent), Skandinavisk Patentbureau, Banegardspaldsen 1, DK-1570 Copenhagen V, DK,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200174248 A1 20011011 (WO 0174248)
Application: WO 2000DK636 20001115 (PCT/WO DK0000636)
Priority Application: DK 2000537 20000331
Designated States: AE AG AL AM AT AT (utility model) AU AZ BA BB BG BR BY BZ CA CH CN CR CU CZ CZ (utility model) DE DE (utility model) DK DK (utility model) DM DZ EE EE (utility model) ES FI FI (utility model) GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KR (utility model) KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SK (utility model) SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW (EP) AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR

(OA) BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
(AP) GH GM KE LS MW MZ SD SL SZ TZ UG ZW
(EA) AM AZ BY KG KZ MD RU TJ TM
Main International Patent Class: **A61B-005/11**
Publication Language: English
Filing Language: English

English Abstract
A method and an apparatus for extracting signals which are indicative of the level of consciousness of a patient comprises subjecting the patient to a repetitive audio stimulus, monitoring **AEP** produced by the patient using an autoregressive model with exogenous input, and then calculating an index (AAI), which is displayed or used otherwise, indicative of the anaesthetic depth.

Legal Status (Type, Date, Text)
Publication 20011011 A1 With international search report.
Examination 20011108 Request for preliminary examination prior to end of 19th month from priority date

Detailed Description
Monitoring **Auditory Evoked Potentials**
Bac&ground of the invention
The present invention relates to a method and an apparatus for calculating an index representing the depth of anaesthesia when monitoring the **audio evoked potentials** of a person, and a computer program adapted to perform the method on a computer...

...are delivered to both ears of the patient, and which produces distinctive potentials, known as **AEP** or **auditory evoked potentials** in the **electroencephalographic** (**EEG**) response of the patient. The headphones and the equipment for producing the **sound** signals, e.g. a signal generator, are not shown in figure 1.

Electrodes, with which...

11/5,K/3 (Item 3 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00554242 **Image available**
PHYSIOLOGICAL SENSING DEVICE
DISPOSITIF DE DETECTION ET DE MESURE DES PROCESSUS PHYSIOLOGIQUES
Patent Applicant/Assignee:
BRIDGER Keith,
COOKE Arthur V,
KUHN Philip M,
LUTIAN Joseph J,
PASSARO Edward J,
SEWELL John M,
WASKEY Terence V,
RUBBIN Gregg R,
Inventor(s):
BRIDGER Keith,
COOKE Arthur V,

KUHN Philip M,
LUTIAN Joseph J,
PASSARO Edward J,
SEWELL John M,
WASKEY Terence V,
RUBBIN Gregg R,
Patent and Priority Information (Country, Number, Date):
Patent: WO 200017615 A2 20000330 (WO 0017615)
Application: WO 99US22146 19990923 (PCT/WO US9922146)
Priority Application: US 98100893 19980923
Designated States: AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE DK EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML MR NE SN TD TG
Main International Patent Class: **A61B-005/00**
Publication Language: English

English Abstract
A device (1) externally applied to an animal or human (7) to detect effects from internal biological functions.

Detailed Description
... attached to the body containing a suspended accelerometer element that responds to all magnitudes and **frequencies** of motion. During physical activity, it therefore reflects the level of effort being exerted overwhelming...the wristband. The device registers movement of the outer surface of the radial artery by **frequency** difference between the impinging and reflected signals as the artery expands and contracts during a...

...associated with a major metropolitan hospital. The channels of recorded information included conventional pulsoximetry, various **electroencephalogram** leads for monitoring activity levels in different parts of the brain, three electrocardiogram leads for...

11/5,K/4 (Item 4 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00420240 **Image available**
ANAESTHESIA CONTROL SYSTEM
SYSTEME DE REGULATION D'ANESTHESIE
Patent Applicant/Assignee:
THE UNIVERSITY COURT OF THE UNIVERSITY OF GLASGOW,
MANTZARIDIS Haralambos,
KENNY Gavin Nicholson Cleghorn,
Inventor(s):
MANTZARIDIS Haralambos,
KENNY Gavin Nicholson Cleghorn,
Patent and Priority Information (Country, Number, Date):
Patent: WO 9810701 A1 19980319
Application: WO 97GB2435 19970910 (PCT/WO GB9702435)
Priority Application: GB 9618998 19960911
Designated States: AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE ES FI GB GE GH HU IL IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MD MG MK MN

MW MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT UA UG US UZ VN YU ZW GH KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Main International Patent Class: **A61B-005/11**

Publication Language: English

English Abstract

An anaesthesia control system and a method of calculating an index representative of the depth of anaesthesia is disclosed. The method comprises subjecting a patient to a repetitive **audio** stimulus and monitoring **auditory evoked potentials** (**AEP**) produced by the patient and then recording these **auditory evoked potentials** using **EEG** recording means and providing a signal corresponding to the **coarseness** of the monitored **AEP** signal and using this signal as an index indicative of anaesthetic depth. The raw **AEP** signal is divided into a series of sweeps and each sweep is synchronised with the repetitive **audio** stimulus and sweeps are recorded in sequence to produce a time averaged sweep from which the anaesthetic index is calculated. The anaesthetic index is constantly updated by repeatedly conducting a successive series of sweeps. The system and index signal can be used as part of an anaesthesia control system for regulating the supply of anaesthetic to the patient to maintain the anaesthetic index at a predetermined level.

11/5,K/5 (Item 5 from file: 349)

DIALOG(R)File 349:PCT FULLTEXT

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00269557

THOUGHT ANALYSIS FROM BRAIN WAVE DATA

ANALYSE DE LA PENSEE A PARTIR DE DONNEES EXTRAITES DES ONDES CEREBRALES

Patent Applicant/Assignee:

HUDSPETH William J,

Inventor(s):

HUDSPETH William J,

Patent and Priority Information (Country, Number, Date):

Patent: WO 9417730 A1 19940818

Application: WO 94US603 19940201 (PCT/WO US9400603)

Priority Application: US 9313026 19930203

Designated States: AU BB BG BR BY CA CN CZ FI HU JP KP KR KZ LK LV MG MN MW NO NZ PL RO RU SD SK UA UZ VN AT BE CH DE DK ES FR GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG

Main International Patent Class: **A61B-005/0484**

Publication Language: English

English Abstract

The subject receives conceptual information from a display screen (1) and background stimuli from a transducer (8). Electrodes (3) pick up the evoked brain waves and pass them to amplifiers (4) and analog-digital converter (5) to condition them for analysis in a computer system (6, 7). The results are then stored on computer disk memory (9) and used to control a peripheral device (10) through an interface (10a).

Detailed Description

... stimuli, :Those stimuli are used to stimulate the receptor system of a.subject at different **frequencies** . When the subject focuses attention on one of the panels, the unique **frequency** associated with that panel generates a unique EP waveform from the brain of the subject, The unique **frequency** dependence generated thereby is used to selectively control a hardware device, Different commands may be...be able to conclude that the color red is equivalent when associated with fine or **coarse** checkerboard stimuli, and at the same time the brain must be able to conclude that...

...EP signals from that subject; Figure 3 shows three types of NCP systems for presenting **auditory** , visual, and tactile simulation, and also a system without a NCP; Figures 4A-4J show...

...the stimulus set shown in Figure 4B; Figure 7 shows a multi-channel recording of **EEG** (SP) data for a subject who is awake when the eyes of that subject are...

11/5,K/6 (Item 6 from file: 349)
DIALOG(R)File 349:PCT FULLTEXT
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00111767
BRAIN ELECTRICAL ACTIVITY MAPPING(BEAM)
RELEVEMENT TOPOGRAPHIQUE DE L'ACTIVITE ELECTRIQUE DU CERVEAU (BEAM)
Patent Applicant/Assignee:
CHILDRENS HOSP MEDICAL CENTER,
Inventor(s):
DUFFY FRANK H,
CULVER NORMAN D,
Patent and Priority Information (Country, Number, Date):
Patent: WO 8203977 A1 19821125
Application: WO 82US633 19820513 (PCT/WO US8200633)
Priority Application: US 81263939 19810515; US 81264031 19810515; US 81264043 19810515
Designated States: AU DE GB JP AT BE CH DE FR GB LU NL SE
Main International Patent Class: **A61B-005/04**
Publication Language: English

English Abstract
Electro-encephalographic (EEG) data from skull electrodes (5) are used to generate a brain electrical activity mapping (BEAM) in the form of topographic maps (48) of the skull displayed as color television images.

Detailed Description
... activity to diagnose brain dysfunction require the skilled neurophysiologist to observe and distinguish time and **frequency** related characteristics of many channels of voltage waveforms derived from an individual's brain and...

...the posJC-stimulus response and is also a multiple of the wavelength of the interfering **frequency** described below, the CNV effect is greatly reduced, The second type of interference results from the existence of background noise at certain characteristic **frequencies** , e.g., 10 Hz, which reflect prominent bands of steady-state **brain wave** activity. The major interfering **frequency** of a given subject may be determined by a spectral

analysis of his background **EEG** signal. The interference problem is especially significant in adults with prominent alpha waves and children with prominent slow **brain wave** activity. By including in the time interval between stimuli a second pseudorandom time element whose...

...number loaded into PROM 24 or PROM 19 so that two different stimuli (e.g., **auditory** and visual) can @R@ ...OMPI be triggered in a preselected order or pattern, with one stimuli being presented more **frequently** than - the other The result of the recording session is an analog tape of raw **EEG** and EP voltage data and V@ calibration voltages on 20 channels with trial markers on...

```
Set     Items   Description
S1       2453   EVOK???(2N)(POTENTIAL? ? OR RESPON???)
S2     113393   AUDIO? OR AUDITORY OR HEARING OR AURAL? OR SOUND? ?
S3       2903   ELECTROENCEPHALOGRA? OR ELECTRO()ENCEPHALOGRA? OR EEG OR B-
            RAIN(2N)WAVE? ?
S4        768   AEP
S5      76321   COARSENESS OR (AMPLITUDE? ? AND FREQUEN?)
S6       1105   S1(3N)S2 OR S2(S)S3 OR S4
S7        212   S6 AND S5
S8         18   S7 AND COARSE?
S9          6   S8 AND IC=A61B
S10         6   IDPAT (sorted in duplicate/non-duplicate order)
S11         6   IDPAT (primary/non-duplicate records only)
? show files
File 348:EUROPEAN PATENTS 1978-2003/Apr W04
         (c) 2003 European Patent Office
File 349:PCT FULLTEXT 1979-2002/UB=20030501,UT=20030424
         (c) 2003 WIPO/Univentio
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B.blio
NPL -
Coarseness

10/5/1 (Item 1 from file: 2)
DIALOG(R)File 2:INSPEC
(c) 2003 Institution of Electrical Engineers. All rts. reserv.

01889769 INSPEC Abstract Number: C82028322
Title: Synthesis of structural geometry using approximation concepts
Author(s): Kirsch, U.
Journal: Computers and Structures vol.15, no.3 p.305-14
Publication Date: 1982 Country of Publication: UK
CODEN: CMSTCJ ISSN: 0045-7949

X

Abstract: Some approximation concepts for efficient synthesis of structural geometry are presented. Using the force method of analysis and neglecting temporarily the implicit compatibility conditions, an approximate explicit problem (**AEP**) is introduced. Solving the **AEP** , a lower bound of the optimum is efficiently obtained. To evaluate the true optimum of the implicit problem, the compatibility conditions are considered for the final geometry of the **AEP** . Choosing the geometric variables as the independent ones, multilevel solution procedures are proposed. To improve the solution efficiency, the number of independent variables is reduced by geometric variable linking. Also, the number of trial geometries is reduced by introducing a **coarse** grid in the independent variable space. Several approximation concepts are proposed for efficient solution of the explicit fixed geometry problem. Linear programming models and approximate treatment of the displacement constraints are presented. The proposed solution procedures do not involve multiple implicit analyses of the structure. Numerical examples show that in a variety of structures, where the optimal geometry is not appreciably affected by the compatibility conditions, a single exact analysis is sufficient to evaluate the final optimum. The efficiency of the solution process and the quality of the approximations used are demonstrated. (28 Refs)

10/5/2 (Item 1 from file: 73)
DIALOG(R)File 73:EMBASE
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04904979 EMBASE No: 1992045194
A case of familial essential myoclonus - Electrophysiological study
Araki K.; Kono I.; Ueda Y.; Kashima K.; Shibasaki H.
Third Department of Internal Medicine, Kyoto Prefectural University of Medicine, Kamikyo-ku, Kyoto 602 Japan
Clinical Neurology (CLIN. NEUROL.) (Japan) 1991, 31/8 (864-868)
CODEN: RISHD ISSN: 0009-918X
LANGUAGE: JAPANESE SUMMARY LANGUAGE: JAPANESE; ENGLISH

A case of familial essential myoclonus was reported with electrophysiological studies. A 58-year-old female presented with involuntary movement (myoclonic jerk) since age 6 years. At the age over 50, she developed difficulty in writing and fine finger movements. Two years ago, the diagnosis of hyperthyroidism was made, but she did not take any anti-thyroid medication. She was admitted to our hospital for further evaluation of myoclonus. On family history, her grandson (4-years-old) had myoclonus. On general physical examination, she showed a diffuse goiter. On neurological examination, she showed spontaneous myoclonus in the face, neck, trunk and the proximal limb muscles, especially in the left upper and right lower extremities. The myoclonus was exacerbated with **auditory**

stimulation and emotional tension, but there was no temporal relationship between each stimulus and myoclonus. There was no myoclonus during sleep. Finger-to-nose test showed **coarse** intention myoclonus. Laboratory examinations including lysosomal enzyme assay revealed no abnormalities except for the decrease in total cholesterol (188 mg/dl) and the increase in serum lactate (19.7 mg/dl). The serum concentration of thyroxin was 18.4 mug/dl, that of triidothyronine 3.0 ng/ml, and that of thyroid stimulating hormone (TSH) 0.027 muIU/ml. Anti-thyroglobulin antibody and anti-microsomal antibody were positive (x100, x6400). Neurological laboratory tests were normal including cerebrospinal fluid, peripheral nerve conduction study, electromyogram (EMG), muscle biopsy, cranial computed tomography and magnetic resonance imaging, and positron emission tomography. Electron transport system of the biopsied muscle was normal. So, we made a diagnosis of familial essential myoclonus and hyperthyroidism. In the electrophysiological studies, the **electroencephalogram** (**EEG**) was within normal limits. The **EEG** -EMG polygraph demonstrated myoclonic jerks in the face, neck and all extremities, which occurred at rest, and revealed an EMG burst of 40~100 msec in duration, involving different muscles asynchronously. All of the somatosensory **evoked potentials** , brainstem **auditory evoked potentials** , and blink reflex were normal in latency and amplitude. Long latency reflexes were not evoked by peripheral nerve stimulation. Tapping of the body did not elicit any myoclonus. From these findings, it is suggested that the myoclonus in this patient might be generated in some subcortical structures in the central nervous system. The myoclonus significantly improved by the administration of clonazepam.

10/5/3 (Item 2 from file: 73)
DIALOG(R)File 73:EMBASE
(c) 2003 Elsevier Science B.V. All rts. reserv.

02648894 EMBASE No: 1984167852
Progressive neurologic deterioration and renal failure due to storage of glutamyl ribose-5-phosphate
Williams J.C.; Butler I.J.; Rosenberg H.S.; et al.
New England Journal of Medicine (NEW ENGL. J. MED.) (United States) 1984, 311/3 (152-155)

A six-year-old boy presented with a history of seizures, progressive neurologic deterioration, and proteinuria. Physical examination revealed mildly **coarse** facies, failure to thrive, generalized hypotonia with muscle wasting, and optic atrophy; there was no organomegaly. The family history suggested an X-linked recessive inheritance. The electroencephalogram, electroretinogram, evoked potentials, and computed axial tomography of the brain were abnormal. Urine oligosaccharide chromatography, urine amino acids and organic acids, and results of leukocyte and fibroblast lysosomal-enzyme assays for the known storage diseases were normal; however, conjunctival and renal biopsy specimens contained enlarged lysosomes on electron microscopy. The patient had progressive neurologic deterioration and died of renal failure at eight years of age. A compound identified as glutamyl ribose-5-phosphate was purified from the brain (0.96 mumol per gram, wet weight) and kidney (0.60 mumol per gram, wet weight). This compound is the linkage group in ADP-ribosylation of proteins, an important regulatory process in gene expression and DNA repair. We believe this new disorder represents a glycoproteinosis that results in the cytoplasmic storage of glutamyl

ribose-5-phosphate.

MEDICAL DESCRIPTORS:
*kidney failure; *proteinuria; *seizure
autopsy; boy; computer assisted tomography; electroencephalography; electron microscopy; electroretinography; **evoked auditory response** ; **evoked** brain stem **response** ; **evoked** visual **response** ; neurologic disease; central nervous system; visual system; histology; preschool child; etiology; diagnosis; therapy; case report; human; kidney; nervous system; computer analysis; peripheral nervous system

10/5/4 (Item 3 from file: 73)
DIALOG(R)File 73:EMBASE
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01048744 EMBASE No: 1978177098
Assessment of the functional condition of the cortical parts of the auditory analyzer in children with hearing disturbances
Belov I.M.; Zaitseva L.M.; Khrizman T.P.; Lomovatskaya L.G.
Probl. Lab. Vosstanovl. Slukha Rechi, I Med. Inst., Leningrad Russia
Vestnik Oto-Rino-Laringologii (VESTN. OTO-RINO-LARINGOL.) (Russia) 1977, 39/5 (9-13)
LANGUAGE: RUSSIAN SUMMARY LANGUAGE: ENGLISH

The work was aimed at ascertaining possibilities of intercentral relations of biopotentials of the projection and associated zones of the brain in children with **hearing** impairment. Children aged from 5 to 7 years (23) with **hearing** impairment were examined; 17 healthy children of the same age served as controls. **EEG** was recorded from 8 symmetrical zones of the brain: frontal, motor, inferior parietal, and temporal on the 'Orion' **electroencephalograph** at the state of restful awakening (with open eyes). In comparison with normal children, the age pattern of the **EEG** was altered in children with impaired **hearing** , although there were no **coarse** pathological signs. Low-amplitude, dysrhythmic **EEG** , particularly in the inferior parietal and the temporal zones were observed. A correlation **EEG** analysis showed the level of space synchronization to be lower in children with **hearing** defects than in healthy ones. The greatest number of correlations with other centers was possessed by those motor zones which established synchronous, synphasic interrelations with the frontal zones. Characteristic of these children was an almost complete absence of intercentral interrelations of biopotentials of the projection temporal zones with other areas of the cortex, particularly, with the associated inferior parietal zones. It is supposed that these interrelations were of significance in the functional system of the centres realizing the **hearing** functions.

MEDICAL DESCRIPTORS:
* **auditory** system; *electroencephalography; * **evoked response audiometry**

10/5/5 (Item 4 from file: 73)
DIALOG(R)File 73:EMBASE
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00525187 EMBASE No: 1976080737

Disinhibitory influence of the activating system due to its artificial excitation initiated in different points of the brain (Russian)

Andreeva V.N.; Irgashev M.S.; Kratin Yu. G.
Pavlov Inst. Physiol., USSR Acad. Sci., Leningrad Russia
Zhurnal Vysshei Nervnoi Deyatelnosti Imeni I.P. Pavlova (ZH. VYSSH. NERVN. DEYAT. IM. I. P. PAVLOVA) 1975, 25/2 (332-341)
LANGUAGE: RUSSIAN

EEG activation can be produced by electrical stimulation of some cortical points with the same threshold current strength as by stimulation of the midbrain RF and thalamic centrum median (CM). Near threshold stimulation of all these points acting simultaneously with inhibitory conditioned signals does not disturb the effector inhibition but displays an **EEG** difference between negative signals: the fine differentiation **sound** evokes considerable **EEG** desynchronization, while the **coarse** one does not change the background rhythms. The same stimulation combined with a positive signal, which has been made ineffective by successive inhibition or extinction, reestablishes the intensive **EEG** activation in response to this signal and the effector conditioned reflex. Therefore a moderate additional stimulation of the activating points in the cortex, RF and CM has a disinhibitory influence. When initiated in the cortex, this influence may be transmitted from the cortical point to other parts of the brain along transcortical and corticofugal connections. (18 references are cited)

10/5/6 (Item 5 from file: 73)
DIALOG(R)File 73:EMBASE
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00112552 EMBASE No: 1974102651

Determinants of the post stimulus resolution of contingent negative variation (CNV)

Wilkinson R.T.; Spence M.T.
MRC Appl. Psychol. Unit Annexe, Cambridge United Kingdom
Electroencephalography and Clinical Neurophysiology (ELECTROENCEPHALOGR. CLIN. NEUROPHYSIOL.) 1973, 35/5 (503-509)

An experiment was made involving 6 female subjects. They heard a warning click (W) followed by one of two tones (S1), followed again by one of two clicks (S2). In half the trials they made a choice key pressing response (R) to the tone; in half no response (NR) was required. Within these trials they made a further choice response to the click (S2) if the tone at S1 was high tone (continued expectancy, CE) but not if S1 was a low tone (noncontinued expectancy, NCE). The CNV present at S1 was resolved towards the baseline whether or not an overt response had to be made to S1 and whether or not the information in S1 counselled continued expectancy. With CE this CNV resolution was arrested when a further CNV developed in preparation for S2. This created a sharp divergence of the CE trace from the NCE trace, the latter continuing its positive going resolution. The latency at this point of CE/NCE divergence correlated positively with motor reaction time to S1 and was delayed when a motor response was required to S1. The cause of return of CNV to baseline is neither due to the overt response nor the final decision concerning the nature of the stimulus, but probably to the first **coarse** identification of the stimulus as one of a relevant class of stimuli. The point of CE/NCE divergence may mark the completion of a second stage of finer analysis and may be an EEG index of final decision latency. Inter individual variance in reaction time is

confined mainly to transactions before this point in processing. The need to make an overt response may absorb processing capacity and therefore delay decision time.

MEDICAL DESCRIPTORS:
*conditioning; *contingent negative variation; *electroencephalography; ***evoked auditory response**

10/5/7 (Item 1 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
(c) format only 2003 The Dialog Corp. All rts. reserv.

07642649 93097848 PMID: 1334316
An analysis of the level and bilateralness of disorders of the brain stem auditory evoked potential **in tumors of the posterior cranial fossa with different locations]**
Analiz urovnia i bilateral'nosti narushenii stvolovogo slukhovogo vyzvannogo potentsiala pri opukholiakh zadnei cherepnoi iamki razlichnoi lokalizatsii.
Sumskii L I; Kuksova N S
Zhurnal voprosy neirokhirurgii imeni N. N. Burdenko (RUSSIA) Jul-Oct 1992, (4-5) p9-11, ISSN 0042-8817 Journal Code: 7809757
Languages: RUSSIAN
The method of stem **auditory evoked potential** was used in the examination of 39 patients with tumors of the posterior cranial fossa of various localization. The time indices of the response were analysed: the peak latency of components I, III, and V and interpeak I-III, III-V, and I-V intervals. The most **coarse** disorders were revealed in patients with tumors of the cerebellopontile angle (100% of cases), which were clearly lateralized. Changes of stem **auditory evoked potential** in patients with cerebellar tumors were encountered somewhat less frequently (in up to 90%) and the response was asymmetric in most cases. As compared to the first group, however, a high percentage of disorders of component V to stimulation of the intact side was noted. Among patients with median localization of the tumor (vermis cerebelli, floor of fourth ventricle) changes were found in 62% of cases (component V). No authentic differences to stimulation of different sides were revealed. The authors discuss problems on the levels of occurrence of disorders of stem **auditory evoked potential** in patients with lesions of posterior cranial fossa structures.

10/5/8 (Item 2 from file: 155)
DIALOG(R)File 155:MEDLINE(R)
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05343656 87021790 PMID: 3766010
[Clinico-physiologic characteristics of brain stem disorders in comatose states]
Kliniko-fiziologicheskaia kharakteristika stvolovykh narushenii pri komatoznykh sostoianiiakh.
Shakhnovich A R; Dubova S B; Belousova O B; Razumovskii A E; Tomas D G
Zhurnal voprosy neirokhirurgii imeni N. N. Burdenko (USSR) Jul-Aug 1986 , (4) p7-14, ISSN 0042-8817 Journal Code: 7809757
Languages: RUSSIAN
Informative signs for classification of disorders of consciousness were

distinguished on the basis of clinico-physiological comparisons. Coma is characterized by failure of attempts to wake the patient, deep coma by muscular atonia, and protective inhibition coma by bilateral mydriasis. Opening of the eyes in response to a sound or pain is characteristic for the apallic syndrome, carrying out of instructions for deep stunning, answering questions for stunning. Clear consciousness is characterized by the patient's ability to orientate. Protective inhibition coma is always characterized by **coarse** changes of short latent evoked potentials in response to acoustic stimulation.

Tags: Human

Descriptors: *Brain Stem--physiopathology--PP; *Coma--diagnosis--DI; Brain Injuries--complications--CO; Cerebral Hemorrhage--complications--CO; Coma--classification--CL; Coma--physiopathology--PP; **Evoked Potentials, Auditory**; **Evoked Potentials**, Somatosensory; Intracranial Aneurysm--complications--CO; Neurologic Examination; Syndrome

Record Date Created: 19861107

Record Date Completed: 19861107

10/5/9 (Item 3 from file: 155)

DIALOG(R)File 155:MEDLINE(R)

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04378351 84020054 PMID: 6624359

Brain stem auditory evoked potentials **in tumors of the posterior parts of the 3d ventricle and pineal gland]**

Stvolovye vyzvannye potentsialy na akusticheskuiu stimuliatsiiu pri opukholiakh zadnikh otdelov III zheludochka i shishkovidnoi zhelezy.

Dubova S B; Klumbis E L; Milovanova L S

Zhurnal voprosy neirokhirurgii imeni N. N. Burdenko (USSR) Jul-Aug 1983, (4) p7-11, ISSN 0042-8817 Journal Code: 7809757

Languages: RUSSIAN

Dynamic studies (one to six times) of stem generated potentials (SGP) to acoustic stimulation were conducted in 32 patients with tumors of the posterior parts of the third ventricle and the pineal gland. In tumors of this localization, the SGP underwent pathological changes in 90% of cases: the response latency increased, its amplitude reduced more or less **coarsely** (even to complete abaissement of the peaks), and the time intervals between the peaks increased. Dynamic studies of SGP to acoustic stimulation may help the surgeon in making the diagnosis and prove valuable in appraising the functional state of the stem structures in the postoperative period.

Tags: Female; Human; Male

Descriptors: Brain Neoplasms--diagnosis--DI; *Brain Stem--physiopathology--PP; *Cerebral Ventricle Neoplasms--diagnosis--DI; * **Evoked Potentials, Auditory**; *Pineal Gland; Adolescent; Adult; Brain Neoplasms--surgery--SU; Cerebral Ventricle Neoplasms--surgery--SU; Child; Child, Preschool; Middle Age; Postoperative Period; Reaction Time--physiology--PH

Record Date Created: 19831123

Record Date Completed: 19831123

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Set     Items   Description
S1     266324   EVOK???(2N)(POTENTIAL? ? OR RESPON???)
S2     968854   AUDIO? OR AUDITORY OR HEARING OR AURAL? OR SOUND? ?
S3     295535   ELECTROENCEPHALOGRA? OR ELECTRO()ENCEPHALOGRA? OR EEG OR B-
            RAIN(2N)WAVE? ?
S4       5510   AEP
S5     143653   COARS?
S6      61381   S1(3N)S2 OR S2(S)S3 OR S4
S7         19   S5 AND S6
S8         12   S7 NOT PY>1996
S9         12   S8 NOT PD>19960911
S10         9   RD (unique items)
? show files
File   2:INSPEC 1969-2003/Apr W4
         (c) 2003 Institution of Electrical Engineers
File   5:Biosis Previews(R) 1969-2003/Apr W4
         (c) 2003 BIOSIS
File   6:NTIS 1964-2003/May W1
         (c) 2003 NTIS, Intl Cpyrght All Rights Res
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File 144:Pascal 1973-2003/Apr W4
         (c) 2003 INIST/CNRS
File 155:MEDLINE(R) 1966-2003/May W1
         (c) format only 2003 The Dialog Corp.
File 172:EMBASE Alert 2003/Apr W4
         (c) 2003 Elsevier Science B.V.
File 198:Health Devices Alerts(R) 1977-2003/May W1
         (c) 2003 ECRI-nonprft agncy
File 434:SciSearch(R) Cited Ref Sci 1974-1989/Dec
         (c) 1998 Inst for Sci Info
File  48:SPORTDiscus 1962-2003/Apr
         (c) 2003 Sport Information Resource Centre
File  71:ELSEVIER BIOBASE 1994-2003/Apr W4
         (c) 2003  Elsevier Science B.V.
File  91:MANTIS(TM) 1880-2002/Oct
         2002 (c) Action Potential
File 162:Global Health 1983-2003/Mar
         (c) 2003 CAB International
File 164:Allied & Complementary Medicine 1984-2003/May
          (c) 2003 BLHCIS
File 467:ExtraMED(tm) 2000/Dec
         (c) 2001 Informania Ltd.
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FT NPL-
Amp Freq

12/3,K/1 (Item 1 from file: 442)
DIALOG(R)File 442:AMA Journals
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00095271
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Increased Rate of P300 Latency Prolongation With Age in SchizophreniaElectrophysiological Evidence for a Neurodegenerative Process (ARTICLE)

O'DONNELL, BRIAN F.; FAUX, STEVEN F.; MCCARLEY, ROBERT W.; KIMBLE, MATTHEW O.; SALISBURY, DEAN F.; NESTOR, PAUL G.; MD, RON KIKINIS; JOLESZ, FERENC A.; SHENTON, MARTHA E.
Archives of General Psychiatry
July, 1995; Original Article: ps_544

Goodin DS, Squires KC, Henderson BH, Starr A. Age-related variations in ' **evoked potentials** to **auditory** stimuli in normal subjects. Electroencephalogr Clin Neurophysiol. 1978;44:447-458.
31.
O'Donnell BF...Each averaged ERP was then digitally low-pass filtered at 16 Hz to attenuate high- **frequency** electromyographic artifact.
P300 latency and **amplitude** were measured at Fz/, Cz/, and Pz/ as the most positive voltage sampled in the...

12/3,K/2 (Item 2 from file: 442)
DIALOG(R)File 442:AMA Journals
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Oscillopsia and Vertical Eye Movements in Tullio's Phenomenon (ARTICLE)

COHEN, HELEN; ALLEN, MAJ JOHN R.; CONGDON, SHARON L.; JENKINS, HERMAN A.
Archives of Otolaryngology
Apr, 1995; Clinical Note: ot_459
LINE COUNT: 00229

... immittance measures showed normal middle ear status; acoustic reflexes were consistent with cochlear hearing loss. **Auditory** brain-stem **evoked responses** were consistent with peripheral sensitivity loss. Audiometry did not indicate an eighth-nerve or auditory...P<.04). As shown in Figure 4, the velocity varied somewhat with stimulus intensity and **frequency** . The relationship between eye movement **amplitude** and intensity of oscillopsia was examined with Spearman rank order correlations. The rather weak result...

12/3,K/3 (Item 3 from file: 442)
DIALOG(R)File 442:AMA Journals
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00055606

'Fatigue' in Patients With Multiple Sclerosis: Motor event-related potentials accompanying the performance of auditory memory tasks (target detection, verbal short-term memory) and...

Archives of Neurology
1992; 49: 517 (8)

...the rested state. We did not change. Brain Potential Recordings Subjects were seated in a **sound** -attenuated room with scalp **electroencephalography** electrodes positioned at /F.sub.z/, /C.sub.z/, /P.sub.z/, /C.sub.3... significantly between the one-and five-item memory loads in distinction to the prolonged scanning **rates** apparent from RT measures. **Amplitude** .--Only the amplitudes of the /P. ...BW, Weiberg H, Ribary U, Cheyne DO, Ancill R. Topographic distribution of the 40 Hz **auditory evoked** -related **potential** in normal and aged subjects. Brain Topogr. 1988;1:117-121. /40/ Lang W, Lang...

12/3,K/4 (Item 4 from file: 442)
DIALOG(R)File 442:AMA Journals
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00052598

Auditory P300 and Eye Tracking Dysfunction in Schizophrenic Pedigrees (Article)

Blackwood, Douglas H. R., MRCPsych; St Clair, David M., MRCPsych; Muir, Walter J., MRCPsych; Duffy, John C., MSc
Archives Of General Psychiatry
1991; 48: 899 (11)

... had been widely reported as abnormal in schizophrenia. Changes in a variety of measures of **amplitude** , **frequency** , and laterality occur, /19/ but they are neither consistent nor specific enough to be of... K Psychiatry. 1986;148:414-420.
24 Roth WT, Cannon EH. Some features of the **auditory evoked responses** in schizophrenia. Arch Gen Psychiatry. 1972;27:466-471...

12/3,K/5 (Item 5 from file: 442)
DIALOG(R)File 442:AMA Journals
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00049720

A Child With an Unusually High-Level Spontaneous Otoacoustic Emission (Article)

Mathis, Alphons, PhD; Probst, Rudolf, MD; Min, Nicola De, MS; Hauser, Rolf, MD
Archives of Otolaryngology-Head & Neck Surgery
1991; 117: 674 (3)

... sound emitting from the left ear canal could be heard with the unaided ear. Click- **evoked** brain-stem **potentials** revealed **hearing** thresholds

on both sides to be within 15 dB hearing level. The parents were reassured ...

...an SOAE of 37 dB SPL at 6.1 kHz. Our report describes a high- **frequency** SOAE with the remarkable **amplitude** of 55 dB SPL in one ear of a 3-year-old boy. This represents...

12/3,K/6 (Item 6 from file: 442)
DIALOG(R)File 442:AMA Journals
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Clinical Experience With Electroneurography in the Pediatric Patient (ORIGINAL ARTICLE)

EAVEY, ROLAND D.; HERRMANN, BARBARA S.; JOSEPH, JANET M.; THORNTON, AARON R.
Archives of Otolaryngology
May, 1989; 115: 600-6071989;
LINE COUNT: 00419 WORD COUNT: 05794

... a second attempt. All subsequent patient testing efforts were completed, for an overall successful test **rate** of 95%. Waveform **amplitude** and morphology were consistent with adult values, except in infants. The most clinically helpful use...

... when response amplitude dropped below 100 mu V, several trials were averaged to reduce high- **frequency** noise. Compound muscle action potential **amplitude** was defined as the maximum-minimum voltage difference in the 15-ms interval beginning 2...profound anemia. A computed tomographic scan demonstrated increased density in the middle ear. Brain-stem **evoked response audiometry** findings revealed a conductive loss (25 dB) for that ear. Results of ENoG demonstrated that...

12/3,K/7 (Item 7 from file: 442)
DIALOG(R)File 442:AMA Journals
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Middle-Latency Responses; II. Variation Among Stimulation Sites (ORIGINAL ARTICLE)

BURTON, MARTIN J.; MILLER, JOSEF M.; KILENY, PAUL R.
Archives of Otolaryngology
April, 1989; 115: 458-4611989;
LINE COUNT: 00171 WORD COUNT: 02360

... the only mechanism available. In these studies, intact hair cells were present. The low growth **rate** of the **amplitude** /intensity function observed with round-window stimulation may reflect a significant "electrophonic" component to this...

CITED REFERENCES:
...Rhinol Laryngol 1982;91:285-291.

10. Kileny PR, Kemink JL: Electrically evoked middle latency **auditory evoked potentials** in cochlear implant candidates. Arch Otolaryngol Head Neck Surg 1987;113:1072-1077.

12/3,K/8 (Item 8 from file: 442)
DIALOG(R)File 442:AMA Journals
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Neurophysiological Evidence of Auditory Channel Anomalies in Developmental Dysphasia (ORIGINAL CONTRIBUTIONS)

STEFANATOS, GERRY A.; GREEN, GARY G. R.; RATCLIFF, GRAHAM G.
Archives of Neurology
August, 1989; 46: 871-8751989;
LINE COUNT: 00257 WORD COUNT: 03557

ABSTRACT: Steady-state **auditory evoked responses** to frequency-modulated tones were obtained from normal children and two groups of children with...

12/3,K/9 (Item 9 from file: 442)
DIALOG(R)File 442:AMA Journals
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Magnetoencephalography; Applications in Psychiatry (COMMENT)

REEVE, ALISON; ROSE, DOUGLAS F.; WEINBERGER, DANIEL R.
Archives of General Psychiatry
June, 1989; 46: 573-5761989;
LINE COUNT: 00215 WORD COUNT: 02977

...that is thought to be measured, the instrument and its applications, and one of the **auditory evoked responses** that has been successfully recorded by MEG.

Brain electrical activity has traditionally been studied with... discharges and in studies of sensory evoked potentials. Most of what is known about the **auditory evoked response** has come from study of the electrical **auditory evoked potential** . The **auditory evoked potential** is obtained by averaging the electrical activity measured over the head following repeated sound stimuli...

... source. Several stimulus parameters appear to affect the amplitude of the N100 from these sources: **loudness** , **frequency** of the tone, duration, and rate of repetition. Careful studies suggest that this generator

reflects... and to explore whether sensory pathways have specific defects. (Ref. 26) Many components of the **auditory evoked potential** have been studied, from early brain-stem-related potentials to cortical potentials arising after 100...

12/3,K/10 (Item 10 from file: 442)
DIALOG(R)File 442:AMA Journals
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Effects of Lidocaine Infusion in Cats After Unilateral Labyrinthectomy (ORIGINAL ARTICLES)

PARNES, STEVEN M.; SPEKTOR, ZORIK; STROMINGER, NORMAN
Archives of Otolaryngology
June, 1988; 114: 653-6561988;
LINE COUNT: 00179 WORD COUNT: 02474

...determined that lidocaine increases axonal and synaptic condition times, evidenced by increased latent periods of **auditory brain** -stem response **waves** in cats. This information was tested on human subjects by Ruth et al, (Ref. 16...

... based on blocking CNS sodium ion channels. (Ref. 17) Our data showed a decrease in **frequency** and **amplitude** of the nystagmus after a systemic injection of lidocaine. This information supports the hypothesis of...
CITED REFERENCES:
...1962;71:116-123.

12/3,K/11 (Item 11 from file: 442)
DIALOG(R)File 442:AMA Journals
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Auditory Brainstem Responses During Systemic Infusion of Lidocaine (ORIGINAL ARTICLE)

JAVEL, ERIC; MOUNEY, DANIEL F.; MCGEE, JOANN; WALSH, EDWARD J.
Archives of Otolaryngology
February, 1982; 108: 71-761982;
LINE COUNT: 00281 WORD COUNT: 03882

... Ref. 12) found, in one of their human subjects, that lidocaine reduced the amplitude of **auditory** brainstem- **evoked response** (ABR) wave I (without altering any other waves), and Wilpizeski and Lowry (Ref. 13) found...ie, all interpeak intervals were lengthened. Latent periods shifted systematically as a function of infusion **rate** , but ABR component **amplitudes** did not change appreciably. The maximum effect of a given lidocaine infusion rate occurred 60...
CITED REFERENCES:

12/3,K/12 (Item 12 from file: 442)
DIALOG(R)File 442:AMA Journals
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Properties of the Brain-stem Response Slow-Wave Component; I. Latency, Amplitude, and Threshold Sensitivity (ORIGINAL ARTICLES)

KLEIN, ALAN J.
Archives of Otolaryngology
January, 1983; 109: 6-121983;
LINE COUNT: 00294 WORD COUNT: 04063

...typical of an awake, resting state.Subjects with high SWR thresholds had EEGs with large- **amplitude** , low- **frequency** activity (subjects D and E) typical of deep sleep (stages 3 and 4). (Ref. 10...

... noticed for other subject. The SWR thresholds measured when subjects were awake (EEG predominantly high- **frequency** , moderate- **amplitude** activity) could be 5 to 20 dB less than when measured during sleep (EEG prodominantly low- **frequency** , high- **amplitude** activity). Since the fast components of the BSR are well known for their stability regardless...
... is increased. This is most apparent at the higher intensity levels. The possibility of a **frequency** dependence of SWR **amplitude** was not tested statistically. As with latency, the change in amplitude with change in signal level is greater at low **frequencies** than at high **frequencies** . **Amplitude** tends to increase slightly between 40- to 50-dB SPL and then abruptly increased at...Again, the only significant correlation occurred at 4.0 kHz.

COMMENT
In order to estimate **hearing** levels by **evoked potential** techniques it is necessary to know the correspondence one can expect between the evoked potential...
CITED REFERENCES:
...audiometry. Audiology 1979;18:445-461.

12/3,K/13 (Item 13 from file: 442)
DIALOG(R)File 442:AMA Journals
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Properties of the Brain-stem Response Slow-Wave Component; II. Frequency Specificity (ORIGINAL ARTICLES)

KLEIN, ALAN J.
Archives of Otolaryngology
February, 1983; 109: 74-781983;
LINE COUNT: 00202 WORD COUNT: 02791

For clinically acceptable estimates of peripheral **auditory** sensitivity,

an **evoked potential** must possess several characteristics. It should be highly reliable (stable) across repeated measurements, recordable to...

... lessened. After each masked threshold was determined, another control run was taken to recheck response **amplitude** . Masker **frequency** was changed, and the procedure was repeated. Tuning-curve measurements began at masker frequency set... less than 50% reduction at 68 dB. At other masker frequencies above or below signal **frequency** , decreases in response **amplitude** with increases in masker level occur gradually. This was typical for most subjects.

12/3,K/14 (Item 14 from file: 442)
DIALOG(R)File 442:AMA Journals
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00030791
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Seizures Provoked by Dressing (LETTERS TO THE EDITOR)

CIRIGNOTTA, FABIO; GERVASIO, LAURA
Archives of Neurology
December, 1982; 39: 785-7861982;
LINE COUNT: 00028 WORD COUNT: 00387

...showed marked cerebral atrophy.
On two different occasions, eight-hour polygraphic recordings were obtained under **audiovisual** control. The **EEG** showed symmetrical slow background activity with sporadic discharges of generalized spikes and slow waves.
Every...

... the limbs. Ictal EEG showed a discharge of diffuse fast activity, with progressive slowing in **frequency** and increased in **amplitude** that was followed by diffuse slowing.
The seizures always began 2 to 4s after the...

12/3,K/15 (Item 15 from file: 442)
DIALOG(R)File 442:AMA Journals
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Colonometry, Cystometry, and Evoked Potentials in Multiple Sclerosis (ORIGINAL CONTRIBUTIONS)

HALDEMAN, SCOTT; GLICK, MICHAEL; BHATIA, NARENDER N.; BRADLEY, WILLIAM E. ; JOHNSON, BONNIE
Archives of Neurology
November, 1982; 39: 698-7011982;
LINE COUNT: 00185 WORD COUNT: 02565

... their examinations. Visual evoked potentials were delayed or absent

bilaterally in all three patients. Brainstem **auditory evoked potentials** were normal or minimally delayed in two patients and abnormal in the third.
Note: This...

... apart with the cathode proximally. The stimulus had a duration of 0.3 ms, a **frequency** of 4.7 Hz, and **amplitude** sufficient to cause a visible twitch in the muscles of the foot. Spinal cord potentials...

12/3,K/16 (Item 16 from file: 442)
DIALOG(R)File 442:AMA Journals
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00030635
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Evoked Potentials in Olivopontocerebellar Atrophy (ORIGINAL CONTRIBUTIONS)

HAMMOND, EDWARD J.
Archives of Neurology
June, 1983; 40: 366-3691983;
LINE COUNT: 00162 WORD COUNT: 02241

ABSTRACT: Pattern-reveral visual evoked potentials, far-field and cortical somatosensory **evoked potentials** , and **auditory** brain-system potentials were recorded in two patients with olivopontocerebellar atrophy. In one patient, visual...

... latencies within normal limits. In the other, more severely afflicted, patient, all visual, somatosensory, and **auditory evoked potentials** were abnormal. (Arch Neurol 1983;40:366-369)
... Fig 3) at the stimulus rate used in routine testing (2/s). At slower stimulus **rates** , however, the **amplitude** of the N20 and P29 potentials became progressively higher. These results were replicated in three...
...also been documented, (Ref. 19) which, if present, could account for the abnormal visual and **auditory evoked potentials** . Demyelination and atrophic changes in the telencephalon have also been reported. (Ref. 6,18)
It...

12/3,K/17 (Item 17 from file: 442)
DIALOG(R)File 442:AMA Journals
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Hypoxic-Ischemic Encephalopathy in the Newborn (NEUROLOGICAL REVIEW)

FENICHEL, GERALD M.
Archives of Neurology
May, 1983; 40: 261-2661983;
LINE COUNT: 00359 WORD COUNT: 04967

... wakefulness, irritability, and excessive responsiveness to stimulation. The typical response to stimulation is a low- **frequency** , high- **amplitude**

shaking of the limbs and jaw. Jitteriness is commonly associated with a low threshold for...

12/3,K/18 (Item 18 from file: 442)
DIALOG(R)File 442:AMA Journals
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Relationships Between Psychiatric Diagnosis and Some Quantitative EEG Variables (ORIGINAL ARTICLES)

SHAGASS, CHARLES; ROEMER, RICHARD A.; STRAUMANIS, JOHN J.
Archives of General Psychiatry
December, 1982; 39: 1423-14341982;
LINE COUNT: 00751 WORD COUNT: 10364

... Computer analysis of eyes-open and eyes-closed EEGs (12 leads) provided time series of **amplitude** , **frequency** , and wave-symmetry measures; mean levels and temporal variability indexes were also factor analyzed across...

... amplitude ratios in depressives. (Ref. 19) For patients with neuroses, compared with nonpatients, higher mean **amplitude** and lower **frequency** variability (Ref. 8) were predicted. In addition to testing the replicability of patient-control differences...linked ears. Certain lead locations deviated from the 10-20 system because somatosensory, visual, and **auditory evoked potentials** were recorded from the same leads following the EEG recording; F(3X), F(4X), C...

12/3,K/19 (Item 1 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
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01112196 I97058216942
Wavelet networks-a new tool for discrimination of EPs in a clinical study
Dickhaus, H; Heinrich, H
Biomedical Engineering. Applications Basis Communications, v8, n6, pp579-593, 1996
ISSN: 1016-2356

ABSTRACT:
...variability of the recorded EP signals quantification of the averaged sweeps by peak latencies and **amplitudes** for discrimination failed. However, time- **frequency** distributions calculated from wavelet-transformed responses gave reason to apply the authors' approach of WNs...
DESCRIPTORS: **AUDITORY EVOKED POTENTIALS** ; DISCRIMINANT ANALYSIS; FEATURE EXTRACTION; COMPUTERISED SIGNAL PROCESSING; CLASSIFICATION; SELF ADJUSTING SYSTEMS; COMPARISON OF METHODS; CHILDREN...

12/3,K/20 (Item 2 from file: 95)
DIALOG(R)File 95:TEME-Technology & Management
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00828707 F94110086947
IFCN recommended standards for brain-stem auditory evoked potentials . **Report of an IFCN committee**
(Von der IFCN empfohlene Standards fuer ausgeloeste Gehoerpotentiale im Stammhirn. Bericht eines IFCN Ausschusses)
Nuwer, MR; Aminoff, M; Goodin, D; Matsuoka, S; Mauguiere, F; Starr, A; Vibert, J-F
Electroencephalography and Clinical Neurophysiology, v91, n1, pp12-17, 1994
ISSN: 0013-4694

IFCN recommended standards for brain-stem auditory evoked potentials . **Report of an IFCN committee**
...DESCRIPTORS: **ELECTROENCEPHALOGRAM** ; BIOELECTRIC POTENTIALS; **HEARING** -- ...

...SENSE ORGAN; AUDIOMETRY; STIMULATION **FREQUENCY** ; ACOUSTIC STIMULUS; **LOUDNESS** ; SYSTEM OF UNITS; STANDARDISATION; CODE OF PRACTICE

12/3,K/21 (Item 1 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
(c) 2003 The Gale Group. All rts. reserv.

01479800 SUPPLIER NUMBER: 15250309 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Adverse environmental conditions in the respiratory and medical ICU settings.
Meyer, Thomas J.; Eveloff, Scott E.; Bauer, Mark S.; Schwartz, William A.; Hill, Nicholas S.; Millman, Richard P.
Chest, v105, n4, p1211(6)
April,1994
PUBLICATION FORMAT: Magazine/Journal ISSN: 0012-3692 LANGUAGE: English

... weighted decibel scale was used because of its close relation to the curve that describes **loudness** and **frequency** for the human ear.[21] Calibration with the Model CA250 Precision Calibrator (Larson Davis) was... 1503-06
[22] Williams HL, Hammack JT, Daly RL, Dement WC, Lubin A. Responses to **auditory** stimulation, sleep loss and the **EEG** stages of sleep. Electroencephalgr Clin Neurophysiol 1964; 16:269-79
[23] Zeplin H, McDonald CS...

12/3,K/22 (Item 2 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
(c) 2003 The Gale Group. All rts. reserv.

01475669 SUPPLIER NUMBER: 14930016 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Neurobehavioral impairment and seizures from formaldehyde.
Kilburn, Kaye H.
Archives of Environmental Health, v49, n1, p37(8)
Jan-Feb,1994
PUBLICATION FORMAT: Magazine/Journal ISSN: 0003-9896 LANGUAGE: English

... nystagmus with rebound, impaired smooth pursuit, optokinetic nystagmus suggestive of cerebellar-brainstem dysfunction. Visual and **auditory evoked potentials** were normal.

Patient #4
This 59-y-old retired railroad worker had impaired speech accompanied ...

...on the right than the left during walking. Rapid distal fine-finger movements had normal **amplitude** and **speed** . Deep tendon reflexes were moderately active throughout, except for an absent right ankle jerk. Plantar...

12/3,K/23 (Item 3 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
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01213267 SUPPLIER NUMBER: 09029740
Delayed detection of congenital hearing loss in high risk infants.
Wild, N.J.; Sheppard, S.; Smithells, R.W.; Holzel, H.; Jones, G.
British Medical Journal, v301, n6757, p903(3)
Oct 20,1990

...ABSTRACT: signals detected in the brain of the child, who is exposed to sounds of different **frequencies** and **loudness** (**evoked auditory response** testing). The purpose of this study was to examine the methods used to detect hearing...
CAPTIONS: Onset and severity of hearing loss. (table); Age at first **auditory evoked response** test. (table); Causes of delayed assessment of hearing. (table)

12/3,K/24 (Item 4 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
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01184119 SUPPLIER NUMBER: 07597787 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Recording and interpretation of cerebral magnetic fields.
Hari, Riitta; Lounasmaa, Olli V.
Science, v244, n4903, p432(5)
April 28,1989
PUBLICATION FORMAT: Magazine/Journal ISSN: 0036-8075 LANGUAGE: English

... fields are not specific to the speech per se but depend on the amount of **frequency** and **amplitude** transients within the modifying sounds.
Studies of Attention
Attention if one of the basic elements...

...sensory-specific projection areas. Recently we have investigated the effects of attentive listening on the **evoked** magnetic **response** in the human **auditory** cortex. The stimuli were five-letter Finnish words, all beginning with a "K" and ending...different cerebral functions. Hemispheric asymmetry has been observed in several studies: the equivalent dipoles of **auditory evoked responses** are, in right-handed subjects, typically 1 to 2 cm posterior in the left to...

12/3,K/25 (Item 5 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)

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01184050 SUPPLIER NUMBER: 07512561 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Detecting childhood hearing loss. (includes related articles)
Cotton, Robin T.; Farrer, Susan M.; Grundfast, Kenneth M.; Stool, Sylvan E.
Patient Care, v23, n5, p55(12)
March 15,1989
PUBLICATION FORMAT: Magazine/Journal ISSN: 0031-305X LANGUAGE: English

... performed in a quiet room, but earphones are a practical alternative. An audiogram provides measured **loudness** thresholds at various **frequencies** from 250-8,000 Hz. It requires an investment of $500-$800, floor space, and...consultant for the accompanying article. Technology has made testing increasingly practical and accurate.
Brain-stem **auditory evoked response** (BAER) testing requires earphones and electrodes, which are placed on the forehead and behind the ...

12/3,K/26 (Item 6 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
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01178255 SUPPLIER NUMBER: 09237258
Electrophysiological effects of fenfluramine or combined vitamin B6 and magnesium on children with autistic behavior.
Martineau, J.; Barthelemy, C.; Roux, S.; Garreau, B.; Lelord, G.
Developmental Medicine and Child Neurology, v31, n6, p721(7)
Dec,1989

..:ABSTRACT: motor activity, anxiety, and mood and attention disturbances. Effects of both types of treatments on **auditory evoked responses** (AERs), were studied in 12 children (nine boys, three girls, aged four to six years...

...increased at the O site, then decreased post-trial. The fenfluramine-treated group showed increased **frequency** and **amplitude** of AERs at the C site after 12 weeks of trial, with decreases post-trial...
CAPTIONS: Details of children studied. (table); Conditioning method. (graph); AER response - grand average, mean **frequency** and mean **amplitude** . (graph); Decreasing AER variability at O and C sites. (graph)

12/3,K/27 (Item 7 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
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01057408 SUPPLIER NUMBER: 02640958 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Schizophrenia: a neurophysiological evaluation of abnormal information processing.
Baribeau-Braun, Jacinthe; Picton, Terence W.; Gosselin, Jean-Yves
Science, v219, p874(3)
Feb 18,1983
PUBLICATION FORMAT: Magazine/Journal ISSN: 0036-8075 LANGUAGE: English

... and targets, the measure of response-set selection. In a similar procedure, we recorded the **auditory evoked potentials** of

schizophrenic subjects, adding a "divided' attention task where subjects had to attend and detect...Electroencepyalogr. Clin. Neurophysiol. 40, 604 (1976)]. They showed that the attention-related changes in N1 **amplitude** decreased at slower stimulation **rates** as the subject became less forced to exclude one channel from processing. Our procedure differed...

```
Set     Items   Description
S1       4701   EVOK???(2N)(POTENTIAL? ? OR RESPON???)
S2      95502   AUDIO? OR AUDITORY OR HEARING OR AURAL? OR SOUND? ?
S3       8562   ELECTROENCEPHALOGRA? OR ELECTRO()ENCEPHALOGRA? OR EEG OR B-
            RAIN(2N)WAVE? ?
S4        191   AEP
S5      38223   AMPLITUD? OR LOUD?
S6     581093   FREQUENC? OR SPEED? ? OR RATE? ?
S7       1330   S1(3N)S2 OR S2(5N)S3 OR S4
S8          9   (S5(5N)S6)(S)S7
S9         45   S5(5N)S6 AND S7
S10        45   RD (unique items)
S11        28   S10 NOT PY>1996
S12        27   S11 NOT PD>19960911
? show files
File 441:ESPICOM Pharm&Med DEVICE NEWS 2003/Apr W4
         (c) 2003 ESPICOM Bus.Intell.
File 442:AMA  Journals 1982-2003/Sep B1
         (c)2003 Amer Med Assn -FARS/DARS apply
File 444:New England Journal of Med. 1985-2003/May W1
         (c) 2003 Mass. Med. Soc.
File  95:TEME-Technology & Management 1989-2003/Apr W3
         (c) 2003 FIZ TECHNIK
File  98:General Sci Abs/Full-Text 1984-2003/Mar
         (c) 2003 The HW Wilson Co.
File 135:NewsRx Weekly Reports 1995-2003/Apr W4
         (c) 2003 NewsRx
File 149:TGG Health&Wellness DB(SM) 1976-2003/Apr W4
         (c) 2003 The Gale Group
File 369:New Scientist 1994-2003/Apr W3
         (c) 2003 Reed Business Information Ltd.
File 370:Science 1996-1999/Jul W3
         (c) 1999 AAAS
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FT
NPL-
Coarseness

11/3,K/1 (Item 1 from file: 442)
DIALOG(R)File 442:AMA Journals
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00095560
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Immunological and Clinical Response to Immunosuppressive Treatment inParaneoplastic Cerebellar Degeneration (ARTICLE)

STARK, ERWIN; WURSTER, ULRICH; PATZOLD, UDO; SAILER, MICHAEL; HAAS, JUDITH
Archives of Neurology
Aug, 1995; Original Contribution: ne_814
LINE COUNT: 00306

... of the gynecological tumor. Results of sensory and motor nerve conduction studies and visual and **auditory evoked potentials** were normal. Findings from serological studies for mumps, rubeola, German measles, cytomegalovirus, herpes simplex, varicella...intrathecal synthesis of this antibody (Table 1 and Table 2). Figure 1 shows the typical **coarse** granular stain in the cytoplasm of Purkinje's cells. No reaction was demonstrated in other...

11/3,K/2 (Item 2 from file: 442)
DIALOG(R)File 442:AMA Journals
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00088894
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Autism: Electroencephalogram Abnormalities and Clinical Improvement With Valproic Acid (ARTICLE)

American Journal of Diseases of Children
Feb, 1994; The Pediatric Forum: p220
LINE COUNT: 00761

... count, blood chemistry studies, and chromosome analysis, including cultures for fragile X, and results of **audiometric** screening were all normal. During sleep the **EEG** revealed independent, sharp waves in both frontal regions.

At the age of 3 years 2...the cessation of all chemotherapy, she was noted to have a sallow complexion, dry skin, **coarse** hair, lethargy, and constipation but no goiter; there was marked growth deceleration (0.6 cm...

11/3,K/3 (Item 3 from file: 442)
DIALOG(R)File 442:AMA Journals
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Oculomotor, Auditory, and Vestibular Responses in Myotonic Dystrophy (ARTICLE)

VERHAGEN, WIM I. M.; BRUGGEN, JAN PIETER TER; HUYGEN, PATRICK L. M.
Archives of Neurology
September, 1992; Original Contribution: p954
LINE COUNT: 00625

...recorded with a tympanometer (Amplaid 720, Amplaid,Milan, Italy) and x-y recorder.

Brain-stem **auditory evoked potentials** were obtained with a Medelec Sensor AS10/ER94a and Telephonics TDH-49P system (Medelec, Surrey ...his acoustic reflexes. The reflexes were normal in all the other patients measured.

Brain-Stem **Auditory Evoked Potentials** .--Some absolute wave delay ofthe total I-V complex was found in four of the...This would be combined with the relative preservation of the small muscle fibers (with a ` **coarse** ' microscopic aspect) with `en grappe' nerve endings, which show more tonic activity, as is required...it exists, cannot be due to a defect in that noise-protection mechanism.

Brain-Stem **Auditory Evoked Potentials** .--The proportion of our patients with BAEPs showing significant IWD (69%) was higher than that...

11/3,K/4 (Item 4 from file: 442)
DIALOG(R)File 442:AMA Journals
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Ophthalmic Manifestations of Infantile Phytanic Acid Storage Disease (CLINICAL SCIENCES)

WELEBER, RICHARD G.; TONGUE, ANDREA C.; KENNAWAY, NANCY G.; BUDDEN, SAROJINI S.; BUIST, NEIL R. M.
Archives of Ophthalmology
September, 1984 ; 102: 1317-13211984;
LINE COUNT: 00256 WORD COUNT: 03540

... the age of 2.4 years showed prolonged latencies from the right eye. Brain-stem **evoked response audiometry** indicated severe to profound sensorineural hearing loss. An electromyogram was normal at the age of... optic nerve heads were pink, but the retinal vessels were markedly attenuated. There was moderately **coarse** retinal pigment epithelial mottling, with chorioretinal disturbance in the midperiphery and far periphery in both...

11/3,K/5 (Item 5 from file: 442)
DIALOG(R)File 442:AMA Journals
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Central Nervous System Involvement in Blue-Rubber-Bleb-Nevus Syndrome (OBSERVATIONS)

SATYA-MURTI, SATY; NAVADA, SHIV; EAMES, FREDERICK
Archives of Neurology
November, 1986; 43: 1184-11861986;
LINE COUNT: 00132 WORD COUNT: 01830

... 1). The lesions were raised, purple in color, partially compressible, and painless. Neurologic examination showed **coarse** vertical and rotatory nystagmus in all gazes. On lateral gazes, there was a lag of...

... nucleus area. None of the lesions showed any definite sign of arteriovenous shunting. Brain-stem **auditory evoked potentials** were markedly abnormal, demonstrating the presence of only wave I on left-side stimulation, and the absence of waves IV and V on right-side stimulation. A 16-channel standard **electroencephalogram** was normal.

It was thought that these intracranial lesions were not surgically resectable. He has...

11/3,K/6 (Item 6 from file: 442)
DIALOG(R)File 442:AMA Journals
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Neuro-Ophthalmologic Findings in Vestibulocerebellar Ataxia (ORIGINAL CONTRIBUTION)

FARRIS, BRADLEY K.; SMITH, J. LAWTON; AYYAR, D. RAM
Archives of Neurology
October, 1986; 43: 1050-10531986;
LINE COUNT: 00281 WORD COUNT: 03886

... a work-up for an acute vestibulopathy included normal computed tomographic scan of the brain, **electroencephalogram** , brain-stem **auditory - evoked response** , and carotid ultrasound. She was given alprazolam, which relieved most of her symptoms. Follow-up...

... 1985, rendered the patient unable to drive. Five days later, her neurologist documented ataxia with **coarse** rotatory and upbeating nystagmus. A magnetic resonance image of the brain was negative. Her symptoms...

11/3,K/7 (Item 7 from file: 442)
DIALOG(R)File 442:AMA Journals
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Segmental Myoclonus; Clinical and Pharmacologic Study (ORIGINAL CONTRIBUTION)

JANKOVIC, JOSEPH
Archives of Neurology
October, 1986; 43: 1025-10311986;

LINE COUNT: 00420 WORD COUNT: 05799

... 1 to 2 Hz). There was residual right Horner's syndrome, skew deviation, ocular dysmetria, **coarse** sustention and kinetic tremor of the arms, marked trunkal ataxia, dysphagia, sleep apnea, and mild...were outstretched or abducted.

A CT scan of the brain and spine and brain-stem **auditory evoked potential** (BAEP) were unremarkable. An EMG revealed denervation potentials in the C6 and C7 innervated muscles rapid (7 to 8 Hz) and less **coarse** resting pronation-supination tremor was noted in his right arm two years after the onset...

CITED REFERENCES:

...6, pp 153-176.

11/3,K/8 (Item 8 from file: 442)

DIALOG(R)File 442:AMA Journals

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00031420

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Relapsing Central and Peripheral Demyelinating Diseases; Unusual Pathologic Features (BRIEF COMMUNICATIONS)

DE LA MONTE, SUZANNE M.; ROPPER, ALLAN H.; DICKERSIN, G. RICHARD; HARRIS, NANCY L.; FERRY, JUDITH A.; RICHARDSON, EDWARD P.

Archives of Neurology
June, 1986; 43: 626-6291986;
LINE COUNT: 00187 WORD COUNT: 02588

... gag reflex was diminished. There was severe dysarthria, small athetoid movements of the fingers, a **coarse** cerebellar hand tremor, decreased limb tone, and slight weakness of the extremities. He was areflexic...

... cubic millimeter and a protein concentration of 45 mg/dL without oligoclonal bands. Brain-stem **auditory evoked potentials** showed wave I only, and pattern shift visual evoked potentials were normal. Motor nerve conduction...

11/3,K/9 (Item 9 from file: 442)

DIALOG(R)File 442:AMA Journals

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00031300

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Loss of Topographic Familiarity; An Environmental Agnosia (ORIGINAL CONTRIBUTION)

LANDIS, THEODOR; CUMMINGS, JEFFREY L.; BENSON, D. FRANK; PALMER, E. PRATHER

Archives of Neurology
February, 1986; 43: 132-1361986;
LINE COUNT: 00324 WORD COUNT: 04479

... left superior visual field during double simultaneous stimulation. Visual acuity was 20/40 OU. A **coarse** action tremor was present in both upper extremities, but there was no weakness and no...

... map of Switzerland without difficulty, but she could not recognize her doctors or nurses without **auditory** clues. She quickly learned to orient herself verbally ("the door of my room is the...

... hypodense area in the territory of the right posterior cerebral artery (Fig 2), and an **EEG** revealed slow-wave activity in the right posteruor temporal area.

One week after discharge, she...

11/3,K/10 (Item 10 from file: 442)

DIALOG(R)File 442:AMA Journals
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Auditory Brain-Stem Potentials With Unilateral Pontine Hemorrhage (ORIGINAL CONTRIBUTION)

HAMMOND, EDWARD J.; WILDER, B. JOE; GOODMAN, IRA J.; HUNTER, STEPHEN B.
Archives of Neurology
August, 1985; 42: 767-7681985;
LINE COUNT: 00062 WORD COUNT: 00868

...studies in animals, the actual neural sources, or even the laterality, of some components of **auditory** brain-stem **evoked potentials** in humans are uncertain. We studied these responses in a 56-year-old patient who...
... Ref. 1,2) the actual neural sources, or even the laterality, of some components of **auditory** brain-stem **evoked potentials** in humans are uncertain. (Ref. 3) Although anatomical and physiological studies in animals indicate that...

... lateral eye movements; there was intermittent ocular bobbing. He had a good down gaze, with **coarse** downbeat nystagmus. There was a marked right lower motor-neuron seventh nerve lesion. There was...

11/3,K/11 (Item 11 from file: 442)

DIALOG(R)File 442:AMA Journals
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Methylphenidate Therapy for Aggression in a Man With Ring 22 Chromosome; Report and Literature Review (ORIGINAL CONTRIBUTION)

REEVE, ALISON; SHULMAN, SALLY A.; ZIMMERMAN, ANDREW W.; CASSIDY, SUZANNE B.
Archives of Neurology
January, 1985; 42: 69-721985;
LINE COUNT: 00181 WORD COUNT: 02500

...Hg, and CSF was acellular, with a protein level of 20 mg/dL. A waking **EEG** showed diffuse medium- to high-voltage slow-wave activity at 2 to 4 Hz and...

... scan was remarkable only for diffuse mild cortical atrophy and hydrocephalus ex vacuo. Brain-stem **auditory evoked potentials** showed mild sensory **hearing** loss bilaterally.

Phenytoin sodium was used parenterally to prevent further seizure activity. A diffuse erythematous... further defining the origin of this clinical variability.

Our patient was a tall man with **coarse** facies and a relatively small head. His facial features are characteristic of the nonspecific findings...

11/3,K/12 (Item 12 from file: 442)
DIALOG(R)File 442:AMA Journals
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Familial Occurrence of Adult-type Neuronal Ceroid Lipofuscinosis (BRIEF COMMUNICATIONS)

TOBO, MIZUE; MITSUYAMA, YOSHIO; IKARI, KOICHI; ITOI, KOKICHI
Archives of Neurology
October, 1984; 41: 1091-10941984;
LINE COUNT: 00199 WORD COUNT: 02755

... received 20 ECT treatments. At age 32 he had a generalized convulsive episode, and an **EEG** revealed an epileptic pattern. At age 33 he received ECT 13 times for the exacerbated...

... treatments. During the last hospitalization, his mood was irritable and impulsive and he complained of **auditory** hallucinations. At age 46 he had several fainting attacks, following which he became stuporous and...

... weight of 32 kg. There was no evidence of congenital malformation. The skin was generally **coarse** and hypertrophic and a diagnosis of ichthyosis vulgaris was made. Findings from neurologic examination were...

11/3,K/13 (Item 13 from file: 442)
DIALOG(R)File 442:AMA Journals
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Hyperekplexia Exacerbated by Occlusion of Posterior Thalamic Arteries (BRIEF COMMUNICATIONS)

FARIELLO, RUGGERO G.; SCHWARTZMAN, ROBERT J.; BEALL, STEVEN S.
Archives of Neurology
April, 1983; 40: 244 - 2461983;
LINE COUNT: 00109 WORD COUNT: 01516

... except for nystagmus on right-sided lateral gaze. There was a severe exacerbation of the **coarse** tremor on intention, with the tremor perpendicular to the line of the movement. A heel...

... with an intraluminal plaque was noted at the origin of the left vertebral artery. Repetitive **EEG** recordings during the startle reaction demonstrated the occurrence of a high-voltage wave at the...

... time, there was a transient increase in the tremor of the upper extremity (Fig 2). **Auditory** brainstem **evoked potentials** on three different occasions were normal. Somatosensory evoked potentials (SEPs) performed on two separate occasions...

11/3,K/14 (Item 14 from file: 442)
DIALOG(R)File 442:AMA Journals
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Unusual Neurotoxicity Associated With Amiodarone Therapy (SPECIAL ARTICLE)

PALAKURTHY, PRASAD R.; IYER, VASUDEVA; MECKLER, ROY J.
Archives of Internal Medicine
May, 1987; 147: 881-8841987;
LINE COUNT: 00189 WORD COUNT: 02613

... exclude posterior cranial fossa lesion (computed tomographic scan and vertebrobasilar arteriography) were normal. Brain-stem **auditory evoked potential** study showed mild prolongation of the I-V interpeak latency bilaterally. Discontinuation of amiodarone therapy...

...treatment was stopped.
Jaw Tremor. -- In two patients a peculiar lower jaw tremor with a **coarse** , rotary character resembling the parkinsonian jaw tremor was observed. The tremor was so disturbing in...

11/3,K/15 (Item 15 from file: 442)
DIALOG(R)File 442:AMA Journals
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An Information Processing Model for Schizophrenia (PERSPECTIVES)

CALLAWAY, ENOCH
Archives of General Psychiatry
March, 1982; 39: 339-3471982;
LINE COUNT: 00642 WORD COUNT: 08864

... tends to be reduced. (Ref. 11) This is referred to as the "averaged evoked potential (**AEP**) self-stimulation phenomenon." If an interval is introduced between key-press and click, the **AEP** increases as the press-click interval is lengthened. We expected schizophrenics to be

vulnerable to...

...to 400 ms. Just as pressing a key to initiate a tone interferes with the **AEP** to the tone, a weak prestimulus preceding a noise interferes with the blink response to...requires a conscious and voluntary effort to make the key-press response; by contrast, the **AEP** and the blink reflex occur without the subject necessarily intending to respond. Thus, slower reaction ...

... schizophrenics more often expect repetition, yet this is not what they report.

Amplitude of the **AEP** component P3 is generally larger the more unlikely the stimulus (ie, inversely correlated with a...fine-grained target data being procesed in the sustained "Y" system by the mask-activated, **coarse** , transient "X" system. (Ref. 36) Is the X system a candidate for membership in system...

VARIABILITY

Late components of the **AEP** in schizophrenia tend to be excessively variable. This seems to be an evoked response correlate...
... discussed as an electrophysiologic analogue of segmental set. (Ref. 44) Increased late variability of the **AEP** is also found in psychotic depression, (Ref. 45) but psychotic depression does not rule out the kind of disorder of information processing that interests us.

In contrast to late **AEP** variability, early **AEP** components in schizophrenia characteristically tend to be more stable. (Ref. 46) In averaging **brain wave** samples, more stable components yield larger average evoked potentials. Thus, late components in schizophrenia are...

11/3,K/16 (Item 16 from file: 442)
DIALOG(R)File 442:AMA Journals
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00024370
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Incontinentia Pigmenti Achromians (Ito) (ORIGINAL CONTRIBUTION)

TAKEMATSU, HIDEAKI; SATO, SACHIKO; IGARASHI, MINORU; SEIJI, MAKOTO
Archives of Dermatology
May, 1983; 119: 391-3951983;
LINE COUNT: 00184 WORD COUNT: 02548

11/3,K/17 (Item 1 from file: 444)
DIALOG(R)File 444:New England Journal of Med.
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00106406
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Weekly Clinicopathological Exercises: Case 37-1989: A 60-year-old Man With Granulomatous Interstitial Nephritis Followed By Neurologic Disease (Case Records of the Massachusetts General Hospital)

Brown, Robert H., Jr.; Sobel, Raymond A.
The New England Journal of Medicine
Sep 14, 1989; 321 (11),pp 739-750
LINE COUNT: 00998 WORD COUNT: 13777

TEXT
...in the left eye, suggestive of bilateral conduction abnormalities in the visual system. Brain-stem **auditory - evoked potentials** revealed an absent wave V bilaterally, indicative of a conduction defect in the brain-stem...fiber bundles (central axonomas) are seen particularly in the left portion of the figure. The **coarse** brown material in the right lower portion is hemosiderin *. **FIGURE OMITTED** *Figure 6.-Central Axonomas...

11/3,K/18 (Item 2 from file: 444)
DIALOG(R)File 444:New England Journal of Med.
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00106328
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Weekly Clinicopathological Exercises: Case 34-1989: A 74-Year-Old Woman With Vertigo And An Adnexal Mass (Case Records of the Massachusetts General Hospital)

Koroshetz, Walter J.; Sullinger, Jana C.
The New England Journal of Medicine
Aug 24, 1989; 321 (8),pp 524-535
LINE COUNT: 00894 WORD COUNT: 12340

TEXT
...in bed because of dizziness on getting up; she denied further headache or tinnitus. An **audiographic** study disclosed high-frequency **hearing** loss, believed consistent with sensorineural deafness in both ears, more marked in the right ear. An **electroencephalogram** was mildly abnormal with the patient awake because of occasional brief runs of low-amplitude...48 hours. On the 17th hospital day examination showed prominent downbeating nystagmus in addition to **coarse** nystagmus to the left side; the patient's dysarthria was more marked. *Figure 3.-Computed...

...in all directions, and there was saccadic substitution for smooth pursuit movements in all directions. **Coarse** downbeating nystagmus was present in the primary position and converted to horizontal nystagmus in the...for maintenance of stable eye position (Ref. 10). On the 17th hospital day she had **coarse** vertical nystagmus that was downbeating in the primary position. Her saccadic eye movements were next...

11/3,K/19 (Item 3 from file: 444)
DIALOG(R)File 444:New England Journal of Med.
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00104447
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Case 14-1988: A 40-Year-Old Man with Rapidly Progressive Blindness and Multiple Cranial-Nerve Deficits (Case Records of the Massachusetts General

Hospital)

Hedges, Thomas R. III; Schoene, William C.; Albert, Daniel M.
The New England Journal of Medicine
April 7, 1988; 318 (14),pp 903-915
LINE COUNT: 00863 WORD COUNT: 11918

TEXT
...antinuclear antibodies and rheumatoid factor and a serologic test for syphilis were negative. Brain-stem **auditory evoked potentials** showed evidence of dysfunction of the right acoustic nerve. Somatosensory evoked potentials, with the stimulus...weakness in the right iliopsoas, hamstrings, and tibialis anticus muscles. Sensation was intact throughout. A **coarse** intention tremor, with dysmetria, was noted on finger-to-nose testing bilaterally. The stance was...intracranial location is further suggested by signs of acoustic-nerve dysfunction seen on brain-stem **auditory evoked potential** recording, and there was evidence of right 12th-nerve damage when the tongue was observed...

11/3,K/20 (Item 4 from file: 444)
DIALOG(R)File 444:New England Journal of Med.
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00103843
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Case 34-1987: A 30-Year-Old Woman With An Ocular Motility Disturbance, Myopathy, and Hypocalcemia (Case Records of the Massachusetts General Hospital)

Wray, Shirley H.; Richardson, Edward P., Jr.
The New England Journal of Medicine
August 20, 1987; 317 (8),pp 493-501
LINE COUNT: 00690 WORD COUNT: 09534

TEXT
...fluid protein level in close to 100 percent of the cases, an abnormality of the **electroencephalographic** pattern in 83 percent, cerebellar signs in 69 percent, short stature in 63 percent, neurosensory **hearing** loss in 54 percent, and delayed puberty in approximately 33 percent. My statistics are similar...fiber itself. A Gomori trichrome stain showed that fibers of this kind were characterized by **coarse** , red-staining granules in the subsarcolemmal zone and within the muscle fiber (Fig. 2). Fibers...Dr. Richardson: The spongy change in these cases most closely resembles the rather **coarse** vacuolation of the white matter that characterizes the infantile disorders originally described by Canavan (Ref...

11/3,K/21 (Item 5 from file: 444)
DIALOG(R)File 444:New England Journal of Med.
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00102432
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Case 43 1986: An 11-Yearold Girl with a Rash, Ataxia, and Cranial-Nerve

Palsies (Case Records of the Massachusetts General Hospital)

Ouellette, E.M.; Fienberg, R.
The New England Journal of Medicine
October 30, 1986; 315 (18),pp 1143-1154
LINE COUNT: 00883 WORD COUNT: 12195

TEXT
...A test of visual-evoked responses revealed an increased latency, but a test of brainstem- **auditory - evoked** **res**ponses demonstrated that they were normal. An **electroencephalogram** showed posterior slowing, more prominent on the right side. Tests for antinuclear antibodies and heterophil...neurologic examination the patient was alert and cooperative. The optic fundi and pupils were normal. **Coarse** nystagmus was observed on upward gaze; horizontal nystagmus was noted on right and left lateral...

11/3,K/22 (Item 6 from file: 444)
DIALOG(R)File 444:New England Journal of Med.
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00102366
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Fatal Familial Insomnia and Dysautonomia with Selective Degeneration of Thalamic Nuclei (Medical Intelligence)

Lugaresi, Elio; Medori, Rossella; Montagna, Pasquale; Baruzzi, Agostino; Cortelli, Pietro; Lugaresi, Alessandra; Tinuper, Paolo; Zucconi, Marco; Gambetti, Pierluigi
The New England Journal of Medicine
October 16, 1986; 315 (16),pp 997-1003
LINE COUNT: 00467 WORD COUNT: 06451

TEXT
...condition worsened; he was no longer able to report his dreams, his motor activity became **coarse** and tremulous, and urinary urgency, dysphagia, and transient diplopia appeared...10 cycles per second, intermingled with sporadic diffuse theta activity, was present in the first **electroencephalogram** (**EEG**), obtained seven months after the onset of the disease. The alpha activity slowly spread to...
...became less reactive, and was finally unreactive to painful stimuli. In the terminal stages, the **EEG** showed background activity of 7 cycles per second that progressively flattened and was mixed with...

11/3,K/23 (Item 1 from file: 149)
DIALOG(R)File 149:TGG Health&Wellness DB(SM)
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01308713 SUPPLIER NUMBER: 11561808 (USE FORMAT 7 OR 9 FOR FULL TEXT)
Lead and minor hearing impairment.
Schwartz, Joel; Otto, David
Archives of Environmental Health, v46, n5, p300(6)
Sept-Oct,1991
PUBLICATION FORMAT: Magazine/Journal ISSN: 0003-9896 LANGUAGE: English

... constant to make the resulting data as normally distributed as possible. In view of the **coarseness** of the data, robust regression techniques seemed more appropriate than simple linear regression. We used ...auditory function. Evidence of slowed nerve conduction in the auditory pathway, indexed by the brainstem **auditory evoked potential** (BAEP), has been observed in lead-exposed monkeys [9] and is consistent with our previous...

...Pratt H, Goldsher M, Rosen S, Shenbau R, Linn S, Mor A, Barkai A. A **Auditory** brainstem **evoked potential** in asymptomatic lead-exposed subject. J Laryngol Otol 1986; 100:1031-36.

[11] Llille F...

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Set     Items   Description
S1       4701   EVOK???(2N)(POTENTIAL? ? OR RESPON???)
S2      95502   AUDIO? OR AUDITORY OR HEARING OR AURAL? OR SOUND? ?
S3       8562   ELECTROENCEPHALOGRA? OR ELECTRO()ENCEPHALOGRA? OR EEG OR B-
            RAIN(2N)WAVE? ?
S4        191   AEP
S5      10913   COARS?
S6       1692   S1(3N)S2  OR S2(S)S3 OR S4
S7         34   S5 AND S6
S8         33   RD (unique items)
S9         23   S8 NOT PY>1996
S10        23   RD (unique items)
S11        23   S10 NOT PD>19960911
? show files
File 441:ESPICOM Pharm&Med DEVICE NEWS 2003/Apr W4
         (c) 2003 ESPICOM Bus.Intell.
File 442:AMA  Journals 1982-2003/Sep B1
         (c)2003 Amer Med Assn -FARS/DARS apply
File 444:New England Journal of Med. 1985-2003/May W1
         (c) 2003 Mass. Med. Soc.
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         (c) 2003 FIZ TECHNIK
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         (c) 2003 The HW Wilson Co.
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         (c) 2003 The Gale Group
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File 370:Science 1996-1999/Jul W3
         (c) 1999 AAAS
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